
**2009 ANNUAL POST-REMEDIATION
MAINTENANCE AND GROUNDWATER
MONITORING REPORT**

**United Technologies Corporation
Pratt & Whitney Division
F&H Buildings
East Hartford, Connecticut**

January 2010

Volume 3 of 3

Prepared for

**UNITED TECHNOLOGIES CORPORATION
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Prepared by

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An Employee Owned Company

Comm. No. 88UT908.001



Loureiro Engineering Associates, Inc.

January 21, 2010

**State of Connecticut
Department of Environmental Protection
Remediation Division
79 Elm Street
Hartford, CT 06016-5127**

Attn: Gil Richards

**RE: United Technologies Corporation
Pratt & Whitney Division
Post-Remediation Maintenance and Monitoring
F&H Buildings, Pratt & Whitney East Hartford, Connecticut
LEA Comm. No. 88UT908**

Dear Mr. Richards:

In accordance with Appendix B and C of the document entitled *Remedial Action Work Plan and Request for Variance Engineered Control of Polluted Soils, F&H Buildings Remediation Project*, approved by the Department of Environmental Protection on June 8, 2005, attached please find the 2009 Annual Post-Remediation Maintenance and Groundwater Monitoring Report for F&H Buildings. The maintenance and monitoring activities were initiated following the December 6, 2006 completion of remediation activities at F&H Buildings.

If you should have any questions or comments, please contact me at (860) 410-2969 or Joe Tota of United Technologies Corporation at (860) 728-6510.

Sincerely,

LOUREIRO ENGINEERING ASSOCIATES, INC.

Tom Salimeno, P.E., L.E.P.
Vice President

Attachment

cc: Maurice Hamel, DEP
Juan Perez, EPA
Lauren Levine, UTC
Joseph Tota, UTC
John Wotus, P&W

Table of Contents

	Page
1. INTRODUCTION	1-1
2. LOCATION AND SITE DESCRIPTION	2-1
3. BACKGROUND	3-1
4. GROUNDWATER MONITORING	4-1
4.1 Description of Groundwater Monitoring Activities	4-1
4.2 Groundwater Elevations	4-1
4.3 Quality Assurance and Quality Control Procedures	4-2
5. GROUNDWATER QUALITY	5-1
5.1 Summary of Analytical Data	5-1
5.2 Data Quality Assessment and Data Usability Evaluation	5-2
5.3 Observed Trends in Groundwater	5-3
5.4 Evaluation of Results Relative to the RSRs	5-4
5.4.1 Compliance Determination	5-5
6. MAINTENANCE MONITORING	6-1
6.1 Monitoring Requirements	6-1
6.2 Summary of Maintenance Monitoring Activities	6-1
7. CONCLUSIONS	7-1



TABLES

Table 5-1	Summary of Sampling and Analytical Information
Table 5-2	Summary of Constituents Detected in Groundwater

FIGURES

Figure 2-1	Site Location Map
Figure 4-1	Site Plan
Figure 4-2	Groundwater Contour Map – March 2009
Figure 4-3	Groundwater Contour Map – June 2009
Figure 4-4	Groundwater Contour Map – September 2009
Figure 4-5	Groundwater Contour Map – December 2009

APPENDICES

Appendix A	Copies of Field Paperwork
Appendix B	Copies of Laboratory Reports
Appendix C	Quality Assurance / Quality Control Documentation
Appendix D	Select Constituent Concentration Graphs
Appendix E	Post-Remediation Maintenance Monitoring Forms



ACRONYMS

CSM	Conceptual Site Model
CT ETPH	Connecticut Extractable Total Petroleum Hydrocarbons
DEP	Connecticut Department of Environmental Protection
DQA	Data Quality Assessment
DQO	Data Quality Objective
DUE	Data Usability Evaluation
ELUR	Environmental Land Use Restriction
EPA	United States Environmental Protection Agency
GIS	Geographic Information System
GWPC	Groundwater Protection Criteria
IDEC	Industrial/Commercial Direct Exposure Criteria
IVC	Industrial/Commercial Volatilization Criteria
LCS	Laboratory Control Sample
LEA	Loureiro Engineering Associates, Inc.
PCB	Polychlorinated Biphenyl
PCE	Tetrachloroethylene
PMC	Pollutant Mobility Criteria
QA/QC	Quality Assurance/Quality Control
RA	Remedial Action
RAWP	Remedial Action Work Plan
RCP	Reasonable Confidence Protocol
RCRA	Resource Conservation and Recovery Act
RCSA	Regulations of Connecticut State Agencies
RDEC	Residential Direct Exposure Criteria
RSR	Remediation Standard Regulation
RVC	Residential Volatilization Criteria
SPLP	Synthetic Precipitate Leaching Procedure
SWPC	Surface Water Protection Criteria
TCA	1,1,1-Trichloroethane
TCE	Trichloroethylene
TCLP	Toxicity Characteristic Leaching Procedure
UTC	United Technologies Corporation
VC	Volatilization Criteria
VOC	Volatile Organic Compound

UNITS

mg/kg	milligrams per kilogram
mg/l	milligrams per liter
µg/l	micrograms per liter



1. INTRODUCTION

United Technologies Corporation (UTC)/Pratt & Whitney retained Loureiro Engineering Associates, Inc. (LEA) to perform the post-remediation groundwater monitoring and maintenance activities associated with the remediation of polychlorinated biphenyl (PCB) contaminated concrete and soil at areas underlying the former F&H Buildings (herein after referred to as the “Project Area”) at the UTC/Pratt & Whitney manufacturing facility in East Hartford, Connecticut (herein after referred to as the “Site”). The remediation of concrete and soil underlying the Project Area was undertaken by UTC/Pratt & Whitney on a voluntary basis in accordance with the document entitled *Remedial Action Work Plan and Request for Variance Engineered Control for Polluted Soil* (RAWP), approved by the Connecticut Department of Environmental Protection (DEP) on June 8, 2005. The F&H Buildings Remediation Project was completed on December 6, 2006.

The following report has been prepared in accordance with the Post-Remediation Groundwater Monitoring Plan and the Post-Remediation Maintenance and Monitoring Program, which are included as Appendix B and C, respectively, of the DEP approved RAWP. This report presents the 2009 annual summary of post-remediation groundwater monitoring and maintenance monitoring of the engineered control. Monitoring was conducted to verify the adequacy of the remediation and long-term effectiveness of the engineered control installed within the Project Area. Six monitoring wells located within and immediately surrounding the Project Area have been sampled on a quarterly basis since June 2007. Semi-annual inspections of the engineered control have also been conducted since that date.

As detailed in Section 5, no PCBs were detected in any of the groundwater samples collected in 2009. The absence of detectable concentrations of PCBs in groundwater indicates that the remediation activities performed to date have been effective in eliminating PCBs as a groundwater contaminant source.

At this time, there is sufficient groundwater data to make a compliance determination relative to Section 22a-133k-3 of the Regulations of Connecticut State Agencies (RCSA), herein referred to as the Connecticut Remediation Standard Regulations (RSRs). As required specified by the regulations, a minimum of two years of groundwater monitoring is required to demonstrate compliance with the RSRs. The detected concentration of each of the constituent of concern for the Project Area was below the Surface Water Protection Criteria (SWPC), Residential



Volatilization Criteria (RVC) and Industrial Volatilization Criteria (IVC) for all four quarterly monitoring events in 2009.



2. LOCATION AND SITE DESCRIPTION

The UTC/Pratt & Whitney East Hartford manufacturing facility is located at 400 Main Street in East Hartford, Connecticut. A Site Location Map is presented as Figure 2-1. The facility encompasses approximately 769-acres of contiguous land. Pratt & Whitney initiated aircraft engine manufacturing operations in East Hartford in December 1929. Current operations are conducted in an approximate 4 million square foot complex and include administration and management, manufacturing, testing, research and development and ancillary services. All of these activities take place in the western portion of the 769-acre property.

The Rentschler Airport and the Klondike Area occupy the eastern portion of the property. UTC/Pratt & Whitney previously used these two areas as an airport and a storage/testing area, respectively. On the northern end of the Airport is a 75-acre portion of the Site that was given to the State of Connecticut and subsequently developed as a football stadium (Rentschler Field). The F&H Buildings Project Area is located in the northern portion of the Main Street facility and is approximately 864,000 square feet in area.



3. BACKGROUND

Several investigations have been conducted at the facility. Between June 2002 and September 2003, LEA conducted a comprehensive Phase I/Phase II/Phase III Investigation in the vicinity of F&H Buildings. This investigation was undertaken on a voluntary basis to assess the environmental issues associated with the demolition of F&H Buildings, which was conducted in 2005 and 2006. Additional information on the Site background and previous environmental investigations can be found in the RAWP and in the report titled *Remedial Action Report - F&H Buildings Remediation Project* (RA Report) prepared by LEA in January 2007 and submitted to the United States Environmental Protection Agency (EPA) and the DEP on February 2, 2007.

The overall remedial action objective of the activities that were conducted within the Project Area between August 2005 and December 2006 was to physically remove, via excavation and off-site disposal, concrete containing total PCB concentrations in excess of 10 milligrams per kilogram (mg/kg) and all soil containing total PCB concentrations in excess of 25 mg/kg and the installation of an engineered control over a portion of the Project Area with soil remaining with a total PCB concentration in excess of 10 mg/kg. An additional remedial objective for this project was to meet compliance with the tabulated numeric criteria of Sections 22a-133k-1 through 22a-133k-3 of the RSRs. For the areas outside of the engineered control, the additional remedial action objective was to meet the Residential Direct Exposure Criteria (RDEC) for PCBs for soils within 4-feet of the final grade, the Industrial/Commercial Direct Exposure Criteria (IDEC) for PCBs for soils located in inaccessible locations and the GB Pollutant Mobility Criteria (GB PMC) for soils above the seasonal high water table.

The remedial action objectives also included the implementation of institutional controls to ensure the long-term protectiveness of the remedy. The institutional controls consist of an Environmental Land Use Restriction (ELUR) to ensure the affected area will not be used for residential purposes and to prohibit excavation of areas deemed environmentally isolated and inaccessible and insure that the engineered control will not be disturbed.

Following the excavation and construction activities, the entire Project Area was restored to be used as a storage area. As part of the restoration, an engineered control was installed within the former Hydraulic Press Area, which contained soil with a residual PCB content of greater than 10 mg/kg. The engineered control consists of a 40-mil thickness high-density polyethylene liner, which was overlain by a minimum of 18-inches of granular fill overlain by a minimum of 3-inches of process aggregate, and overlain by a minimum of 3-inches of bituminous pavement.



Four permanent survey markers were placed at the four corners of the engineered control to delineate the limits of the engineered control.

Post-remediation groundwater sampling from monitoring wells installed in and immediately surrounding the Project Area has been conducted on a quarterly basis since June 2007. Semi-annual inspections of the engineered control have also been conducted since June 2007.



4. GROUNDWATER MONITORING

Groundwater monitoring activities were performed in accordance with subsection (f) of Section 22a-133k-3 of the RCSA also referred to as the RSRs. The groundwater monitoring plan detailed in Appendix B of the RAWP and Appendix R of the RA Report was designed to determine:

- The effectiveness of soil remediation in preventing further pollution of groundwater by substances from the release area.
- The effectiveness of any remediation taken to eliminate or minimize identified health or safety risks associated with such release.
- Whether applicable SWPC and VC have been met.

In May 2007, a total of six groundwater monitoring wells (FB-MW-01, FB-MW-02, and HB-MW-04 through HB-MW-07) were installed within and around the F&H Project Area. The locations of these monitoring wells are depicted on the Site Plan included as Figure 4-1 of this report.

4.1 Description of Groundwater Monitoring Activities

Groundwater samples were collected during four quarterly events in 2009 (March, June, September and December) from the six groundwater monitoring wells installed at the Project Area. All groundwater samples were sent under chain of custody control to Accutest Laboratories (Accutest) of Marlborough, Massachusetts and were analyzed for the following parameters: PCBs by EPA Method 8082; volatile organic compounds (VOCs) by EPA Method 8260B; Connecticut Extractable Total Petroleum Hydrocarbons (CT ETPH) by the DEP approved method; and total metals (arsenic, barium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, and zinc). In addition, one duplicate sample, one trip blank, and one equipment blank were analyzed during each sampling event. Copies of field paperwork are included as Appendix A and copies of laboratory reports are included in Appendix B of this report.

4.2 Groundwater Elevations

Depth to groundwater was measured in all six monitoring wells on a quarterly basis using an electronic water level indicator. Groundwater levels were measured to the nearest 0.01 foot.



Water level measurements were collected by LEA on the following four dates: March 12, 2009; June 18, 2009; September 18, 2009; and December 7, 2009. Groundwater-level information was used to evaluate groundwater flow directions and horizontal hydraulic gradients in the upper portion of the unconsolidated aquifer. Generalized groundwater contour maps from the March, June, September and December 2009 monitoring events have been included as Figures 4-2 through 4-5, respectively.

4.3 Quality Assurance and Quality Control Procedures

During the course of the 2009 post-remediation monitoring, a significant amount of information was obtained for the Site. This information included analytical data for groundwater samples; field measurements; sample tracking forms; and other documentation associated with sample collection and analysis. Ensuring that the data generated during the post-remediation monitoring was of sufficient quality to meet the data quality objectives (DQOs) for the project, performance and documentation of quality assurance/quality control (QA/QC) procedures for field and office activities was essential. The following DQOs were developed for the Post-Remediation Groundwater Monitoring Program for the Site:

- Samples collected were of sufficient quality and quantity to assess the groundwater conditions at the Site.
- Data obtained were of sufficient quality and quantity to support a regulatory compliance determination.
- Data were sufficient to determine handling and disposal requirements for purged groundwater and decontamination solutions generated during the post-remediation groundwater monitoring activities.

The various types of QA/QC procedures used to ensure that the quality of data generated during the investigation would be sufficient to meet the DQOs for the project included the analysis of trip blanks, equipment blanks, and field duplicate samples. A detailed description of the methods employed to collect and analyze these QA/QC samples is provided in Appendix C.

All data generated during 2009 post-remediation groundwater sampling were analyzed using the DEP Reasonable Confidence Protocols (RCPs), which are analytical methods based on the respective EPA or other appropriate methods. The RCPs provide specific requirements for QA/QC that the laboratory must follow during analysis of environmental samples. QA/QC



information provided by laboratories using the RCP methods was assessed and evaluated in accordance with the guidelines for performing Data Quality Assessments (DQAs) and Data Usability Evaluations (DUEs). A further explanation of the DQA and DUE process and a discussion of the results of the DQA and DUE are provided in Appendix C.



5. GROUNDWATER QUALITY

5.1 Summary of Analytical Data

A total of 28 groundwater samples (includes monitoring well samples and duplicate samples) were collected in 2009 (March, June, September and December). A summary of sampling and analytical information is included as Table 5-1. A summary of constituents detected in groundwater is provided as Table 5-2. The following is a summary of analytical results for each constituent of concern.

Polychlorinated Biphenyls: No PCBs were detected in any of the 28 groundwater samples that were collected for analysis in 2009.

Volatile Organic Compounds: As shown on Table 5-1, a total of 28 groundwater samples were submitted for analysis of VOCs. Of the 28 samples analyzed, 20 contained detectable concentrations of one or more VOCs. The maximum concentration of each compound in micrograms per liter (µg/l) is as follows:

1,1-Dichloroethane	2.8 µg/l
cis-1,2-Dichloroethylene	2.3 µg/l
Tetrachloroethylene	75.2 µg/l
1,1,1-Trichloroethane	6.1 µg/l
Trichloroethylene	1.8 µg/l

Total Petroleum Hydrocarbons: Of the 28 groundwater samples analyzed for CT ETPH, a total of 24 samples contained detectable concentrations. The maximum concentration of CT ETPH was detected in the September 2009 sample from monitoring well FB-MW-01 at 1.24 milligrams per liter (mg/l).

Metals: Of the 28 groundwater samples analyzed for unfiltered metals (arsenic, barium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, and zinc), a total of three samples contained detectable concentrations. The maximum concentration of each metal in milligrams per liter (mg/l) is as follows:

Total Chromium	0.136 mg/l
Copper	0.0426 mg/l



5.2 Data Quality Assessment and Data Usability Evaluation

All data were evaluated with respect to quality by conducting a DQA and DUE in accordance with the methodology described in the November 2007 guidance document entitled, *Reasonable Confidence Protocols* and presented in more detail in the May 2009 document entitled *Laboratory Quality Assurance Quality Control, Data Quality Assessment, Data Usability Evaluation Guidance Document*. The DQA was performed to assess the quality of the analytical data in each laboratory analytical report package.

QA/QC issues identified during the DQA process included:

- Results for Laboratory Control Sample (LCS) for VOCs outside the accepted range of variability;
- Recoveries for Matrix Spike/Matrix Spike Duplicate (MS/MSD) for VOCs outside the accepted range of variability; and
- Recoveries for initial calibration curve and continuing calibration curve outside the accepted range of variability for specific VOC constituents.

After the laboratory analytical data were evaluated during the DQA, a DUE was performed. The DUE took into account the following:

- the site-specific conceptual site model (CSM);
- knowledge of the contaminant types, concentrations, and distribution;
- objectives for the data collection effort and the intended use of the data (i.e. the data quality objectives (DQOs)); and
- results from field QA/QC sampling.

The DQA worksheets are provided in Appendix C. The DQA resulted in identifying data for which the quality could affect its potential use in decision-making.

In general, the QA/QC deficiencies identified due not pertain to any of the primary constituents of concern for the Project Area. Taking into consideration multiple lines of evidence, results from the DUE indicated that the data generated during the 2009 quarterly groundwater sampling events were usable for the intended purpose. A more detailed discussion of the DQA and DQE results is included in Appendix C.

5.3 Observed Trends in Groundwater

There is sufficient groundwater data at this time to observe trends in types of contamination at particular monitoring wells as two complete years of quarterly groundwater sampling have been performed. Trend graphs were generated for selected constituents using data from June 2007 to December 2009 and are included in Appendix D. It should be noted that in the generation of constituent concentration graphs, a value of one half of the reporting limit was established for graphing in each instance where a particular constituent or compound was reported as a non-detect. Data trends for the past two years are discussed by analytical group in the paragraphs below.

Polychlorinated Biphenyls: PCBs have not been detected in groundwater samples collected during the post-remediation groundwater monitoring program. However, it should be noted that the reporting limit for total PCBs for all of the groundwater samples collected during 2008 was above the default numeric SWPC of 0.5 ug/l. PCBs were not detected during 2009 at a reporting limit of 0.27 ug/l.

Total Petroleum Hydrocarbons: CT ETPH has been consistently detected in groundwater collected from monitoring wells FB-MW-01, HB-MW-06, and HB-MW-07. CT ETPH has also been detected periodically in groundwater samples from monitoring wells FB-MW-02, HB-MW-04 and HB-MW-05. The highest concentrations of CT ETPH in 2009 were detected in monitoring well FB-MW-01. No discernable upward or downward trends were observed for CT ETPH based on analytical data for Project Area monitoring wells.

Volatile Organic Compounds: There were no VOCs detected in groundwater samples from monitoring wells HB-MW-04 and HB-MW-05 during 2009. One or more VOCs were detected in groundwater samples from monitoring wells HB-MW-01, HB-MW-02, HB-MW-03 and HB-MW-06. Concentration graphs for selected compounds are presented in Appendix D. The graphs include data from June 2007 through December 2009.

The concentrations of 1,1,1-trichloroethane (TCA), trichloroethylene (TCE) and Tetrachloroethylene (PCE) reported in groundwater samples from monitoring well FB-MW-01 exhibited a downward trend through the beginning of 2009 before stabilizing. A slight decreasing trend that began in December 2008 was also noted for TCA in groundwater samples from monitoring well HB-MW-07.



Metals: Arsenic was detected in groundwater samples from monitoring well HB-MW-04 during the first four quarters of post-remediation monitoring, but has not been detected since March 2008. Barium was detected in groundwater samples from all six monitoring during 2008, but was not detected in 2009.

A spike in the concentrations of three metals (total chromium, copper and nickel) was detected in the groundwater sample from monitoring well HB-MW-05 during the September 2009 monitoring event. A similar spike of the same magnitude was observed in groundwater samples collected from this well in December 2007.

5.4 Evaluation of Results Relative to the RSRs

Groundwater analytical results for the 2009 post-remediation monitoring were compared to applicable numeric criteria of the RSRs. These criteria were established to protect existing uses of groundwater, surface water quality where groundwater plumes discharge into water bodies, and air quality from the effects of vapors emanating from VOCs present in contaminated groundwater.

According to the Ground Water Quality Classification data-layer in the most recent DEP Geographic Information system (GIS) database, groundwater beneath the Site and surrounding areas is designated as “GB”. According to the DEP Water Quality Standards (Ground Water Quality Standards Effective April 12, 1996), groundwater classified as GB is presumed not suitable for human consumption without treatment. In “GB” groundwater quality areas, the groundwater protection aspect of the RSRs is designed to preserve water quality to permit the existing uses of groundwater and prevent further degradation of groundwater quality. No specific Ground Water Protection Criteria (GWPC) exists for groundwater in GB areas.

The groundwater analytical data collected from the Site have been compared to the numeric SWPC, RVC and IVC. The analytical data were also evaluated relative to the draft VC listed in the *Proposed Revisions – Connecticut’s Remediation Standard Regulations - Volatilization Criteria* issued by the DEP in March 2003 was conducted for comparative purposes. Once finalized, the draft VC will apply to groundwater within 30 feet of the ground surface or a building.

If contaminated groundwater with exceedances of the RVC is located below a building used for industrial/commercial activity, and not residential activity, an ELUR must be in place to restrict future residential use. Exceedances of the RVC or IVC are acceptable in situations where an



ELUR has been filed and appropriate engineering measures (i.e., sub-slab ventilation system or other barrier) prevent the migration of VOCs into any overlying building, providing that the proper maintenance, monitoring, and notifications are performed. The groundwater data was compared to the both the RVC and IVC, as a draft ELUR prohibiting the use of the Site for residential purposes has been submitted to the DEP but has not been reviewed or approved. It should be noted that based on groundwater elevation data accumulated for the Study Area, groundwater does not flow toward or beneath any residential buildings surrounding the Pratt & Whitney facility. There were no exceedances of the current/proposed RVC or IVC during the 2009 groundwater sampling events.

One exceedance of the RSRs was identified for copper during the 2008 post remediation groundwater monitoring. Copper was detected at a concentration of 0.051 mg/l in the groundwater sample from monitoring well HB-MW-05 in March 2008 at a concentration that exceeded the default numeric SWPC of 0.048 mg/l. Copper was reported at concentrations that were less than the default SWPC during all four sampling events in 2009.

The analytical reporting limits for arsenic in all groundwater samples collected during the March and June 2008 monitoring events were above the default numeric SWPC of 0.004 mg/l. The reporting limits for PCBs were also above the default numeric SWPC of 0.5 µg/l for all groundwater samples collected in 2008. Reporting limits that were below the SWPC for arsenic and PCBs were achieved for all groundwater samples collected in 2009. Arsenic and PCBs were not present in groundwater samples at the lower detection limits.

5.4.1 Compliance Determination

This groundwater monitoring program has been designed to determine:

- The effectiveness of soil remediation in preventing further pollution of ground water by substances from the release area;
- The effectiveness of any remediation taken to eliminate or minimize identified health or safety risks associated with such release;
- Whether applicable surface-water protection criteria and volatilization criteria have been met; and



- Whether the groundwater plume interferes with any existing use of the groundwater for a drinking water supply or with any other existing use of the groundwater, including but not limited to industrial, agricultural or commercial uses.

After completing more than two years of post-remediation groundwater sampling on a quarterly basis, there are sufficient groundwater data to make a compliance determination relative to the RSRs. PCBs, VOCs, and total metals were reported at concentrations that were less than SWPC, RVC and IVC during all four quarterly monitoring events in 2009.



6. MAINTENANCE MONITORING

6.1 Monitoring Requirements

The post remediation maintenance program for the engineered control was developed to ensure that the structural integrity, design permeability, and effectiveness of the engineered control will be maintained. This maintenance program was developed to:

- Periodically inspect the engineered control;
- Identify measures to be taken to prevent run-on and run-off of stormwater from eroding or otherwise damaging the engineered control; and
- Identify measures to be taken to correct the effects of any settling, subsidence, erosion or other damaging events or conditions.

The engineered control and the area surrounding the engineered control were inspected in June and December of 2009 in the following areas:

1. Signs of erosion.
2. Signs of settling.
3. Signs of ponding and run on.
4. Damage to the pavement
5. Permanent Survey Markers for the Engineered Control
6. Monitoring well network.

The completed Post-Remediation Maintenance Monitoring forms are included in Appendix E of this report.

6.2 Summary of Maintenance Monitoring Activities

During the June 2009 and December 2009 monitoring events the ponding of water was observed near monitoring well HB-MW-06. The water extended from HB-MW-06 in a southeast direction toward HB-MW-04. Based on the minimal extent of the ponding, it was not expected to have any effect on the efficiency of the engineered control. No deficiencies were observed during the 2009 that required corrective action.



7. CONCLUSIONS

A total of four quarterly groundwater monitoring events were performed in 2009 in accordance with Appendix B and Appendix C of the RAWP (LEA, 2004) for the F&H Buildings Project Area. No PCBs were detected in any of the groundwater samples collected and analyzed in 2009. The continued absence of PCBs in groundwater indicates that the remediation activities within the Project Area have been effective in eliminating PCBs as a groundwater contaminant source.

At this time, two years of groundwater monitoring have been completed at the Site and there is sufficient data to make a compliance determination with respect to the RSRs. No constituents of concern were detected in groundwater samples at concentrations exceeding the default numeric SWPC, RVC or IVC during the past four consecutive quarterly monitoring events.

Two maintenance monitoring inspections were conducted in 2009 following the June 2009 and December 2009 quarterly monitoring events. No deficiencies were observed in 2009 that would require corrective action. Additional inspections and corrective action measures, if necessary, will continue to be implemented as part of the 2010 maintenance and monitoring program.



TABLES

Table 5-1

SUMMARY OF SAMPLING AND ANALYTICAL INFORMATION

Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2009 Annual Groundwater
Monitoring Report

Loureiro Engineering Associates, Inc.

Sample Information					Analysis Information							
Location ID	Sample ID	Sample Date	Sampled Interval (ft)	Sample Class	LEAAlyt. Lab.	Volatile Organics	Semivolatile Organics	Herbicides	Pesticides/PCBs	Fuels/Oils	Metals	Miscellaneous Analyses
FB-MW-01	1117576	03/12/2009	4.00 - 14.00	GWS		X			x	X	x	
FB-MW-01	1117581	03/12/2009	4.00 - 14.00	GWS		X			x	X	x	
FB-MW-01	1122874	06/18/2009	4.00 - 14.00	GWS		X			x	X	x	
FB-MW-01	1131963	09/18/2009	4.00 - 14.00	GWS		X			x	X	x	
FB-MW-01	1136032	12/07/2009	4.00 - 14.00	GWS		X			x	X	x	
FB-MW-02	1117579	03/12/2009	4.00 - 14.00	GWS		X			x	x	x	
FB-MW-02	1122875	06/18/2009	4.00 - 14.00	GWS		X			x	X	x	
FB-MW-02	1122880	06/18/2009	4.00 - 14.00	GWS		X			x	X	x	
FB-MW-02	1131964	09/18/2009	4.00 - 14.00	GWS		X			x	X	x	
FB-MW-02	1131970	09/18/2009	4.00 - 14.00	GWS		X			x	X	x	
FB-MW-02	1136034	12/07/2009	4.00 - 14.00	GWS		X			x	x	x	
HB-MW-04	1117577	03/12/2009	4.00 - 14.00	GWS		x			x	X	x	
HB-MW-04	1122877	06/18/2009	4.00 - 14.00	GWS		x			x	X	x	
HB-MW-04	1131967	09/18/2009	4.00 - 14.00	GWS		x			x	X	x	
HB-MW-04	1136031	12/07/2009	4.00 - 14.00	GWS		x			x	X	x	
HB-MW-05	1117578	03/12/2009	4.80 - 14.80	GWS		x			x	x	X	
HB-MW-05	1122878	06/18/2009	4.80 - 14.80	GWS		x			x	X	x	
HB-MW-05	1131966	09/18/2009	4.80 - 14.80	GWS		x			x	X	X	
HB-MW-05	1136035	12/07/2009	4.80 - 14.80	GWS		x			x	x	X	
HB-MW-06	1117574	03/12/2009	4.00 - 14.00	GWS		X			x	X	x	
HB-MW-06	1122876	06/18/2009	4.00 - 14.00	GWS		X			x	X	x	
HB-MW-06	1131965	09/18/2009	4.00 - 14.00	GWS		X			x	X	x	
HB-MW-06	1136030	12/07/2009	4.00 - 14.00	GWS		X			x	X	x	
HB-MW-06	1136033	12/07/2009	4.00 - 14.00	GWS		X			x	X	x	
HB-MW-07	1117575	03/12/2009	5.00 - 15.00	GWS		X			x	X	x	
HB-MW-07	1122873	06/18/2009	5.00 - 15.00	GWS		X			x	X	x	
HB-MW-07	1131962	09/18/2009	5.00 - 15.00	GWS		X			x	X	x	
HB-MW-07	1136036	12/07/2009	5.00 - 15.00	GWS		X			x	X	x	

Legend: x - mass, t - TCLP, s - SPLP, e - EPTOX, z - ZHE, d - Thermal Desorption, r - Charcoal Tube, a - SEM/AVS, m - Methanol, nr - not received; Capitalized - at least one analyte in class detected

Page 1 of 1

Printed on 12/31/2009



Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2009 Annual Groundwater Monitoring Report

[illegible]



Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2009 Annual Groundwater Monitoring Report

[illegible]



Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2009 Annual Groundwater Monitoring Report

[illegible]



Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2009 Annual Groundwater Monitoring Report

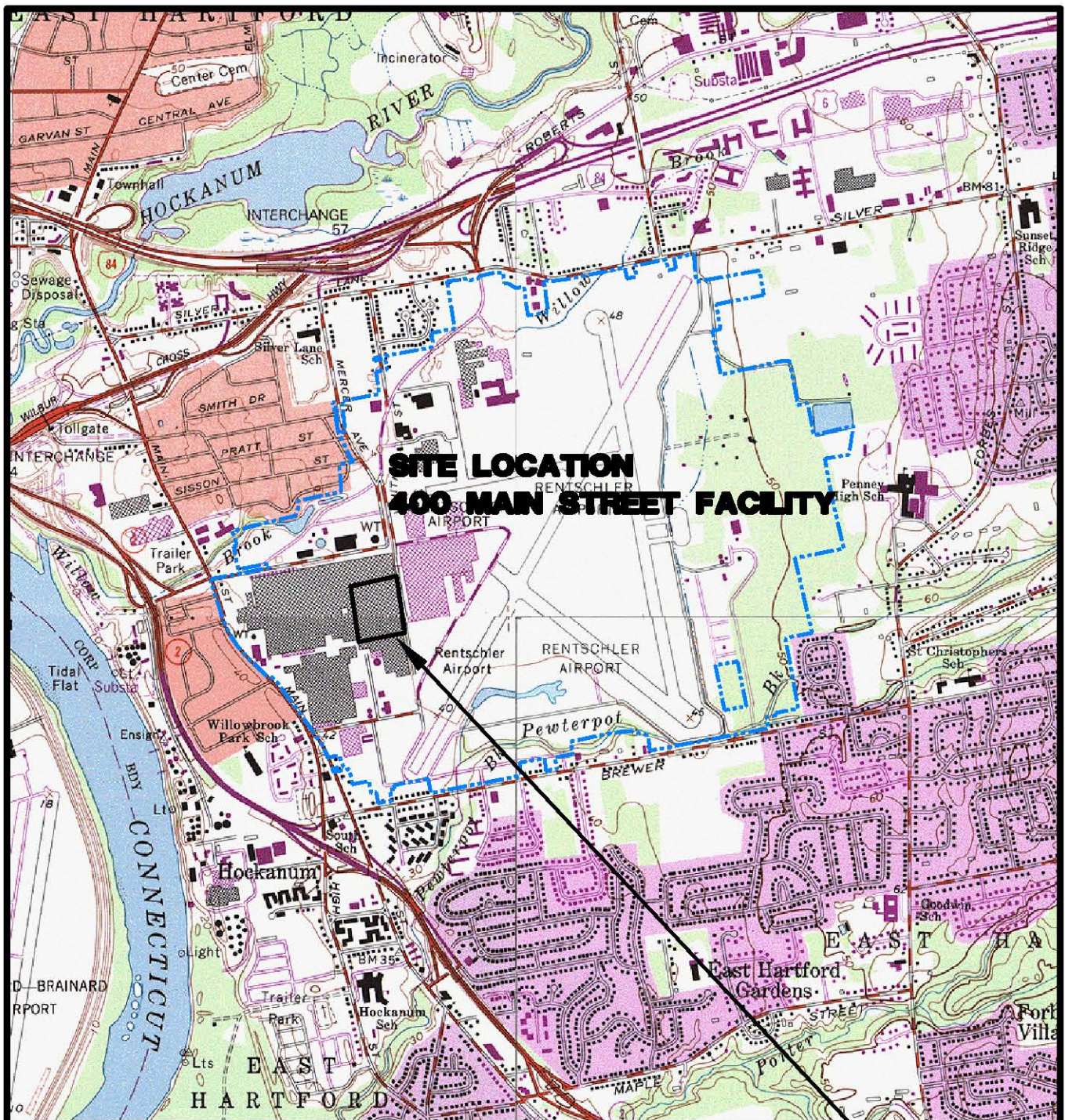
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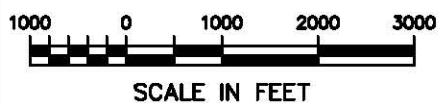
Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2009 Annual Groundwater Monitoring Report

[illegible]

FIGURES



MAP REFERENCE:
USGS 7.5 MINUTE SERIES QUADRANGLES
FOR HARTFORD NORTH, HARTFORD SOUTH,
GLASTONBURY, AND MANCHESTER CONN.,
DATED 1964 & 1963 AND REVISED 1992.



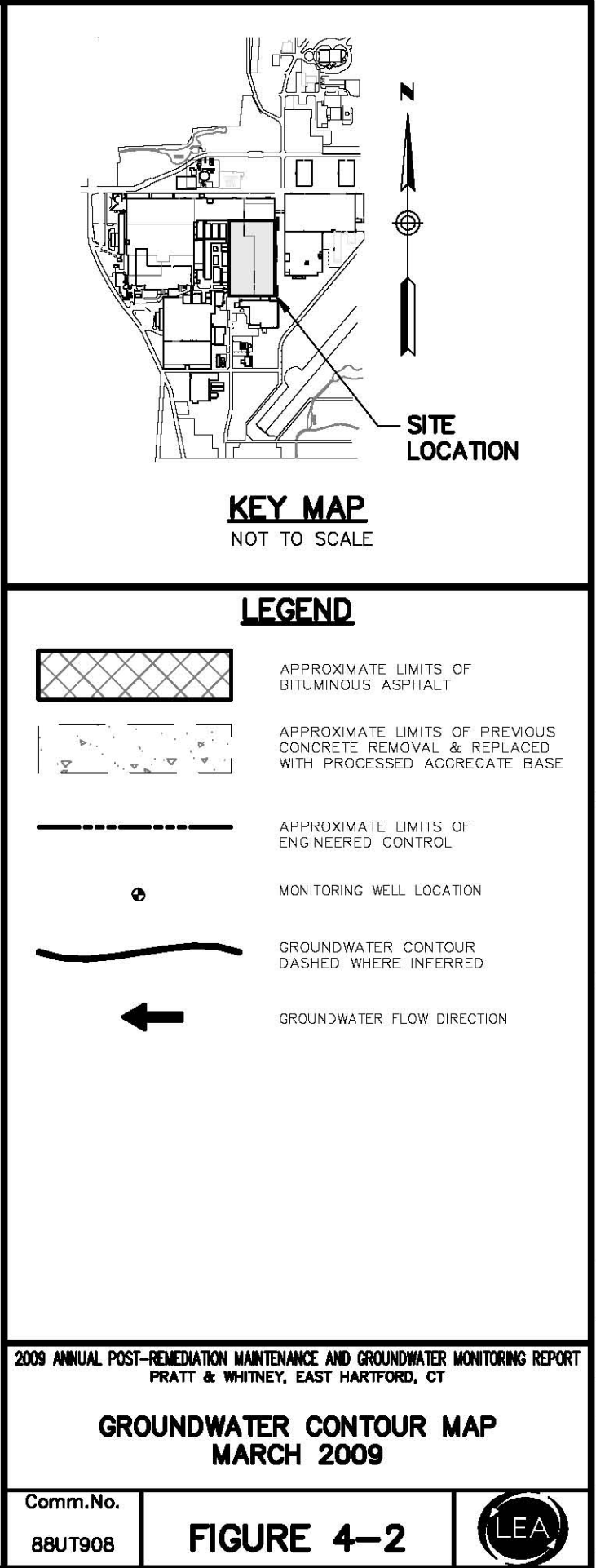
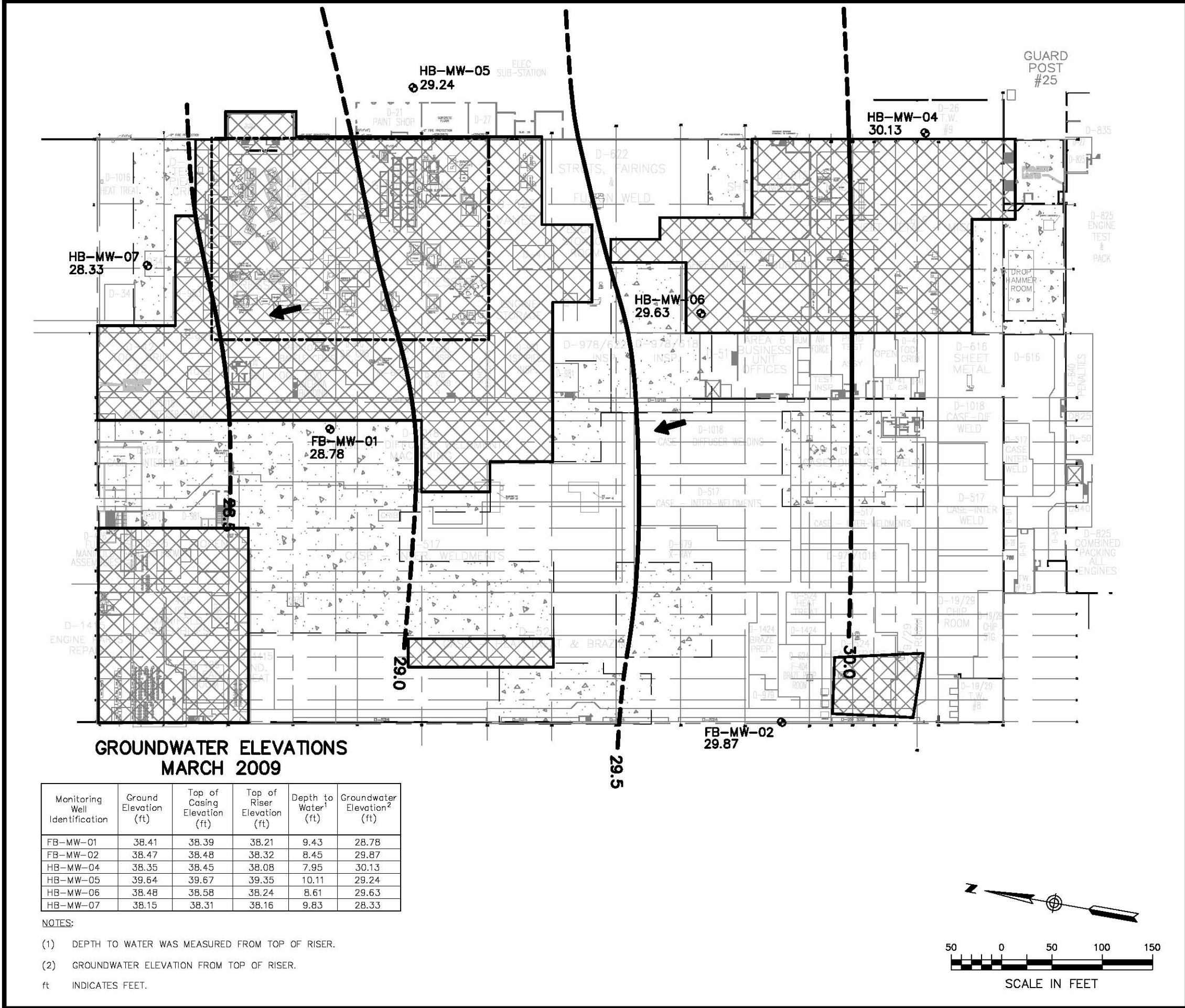
2009 ANNUAL POST-REMEDIATION MAINTENANCE AND GROUNDWATER MONITORING REPORT
PRATT & WHITNEY, EAST HARTFORD, CT

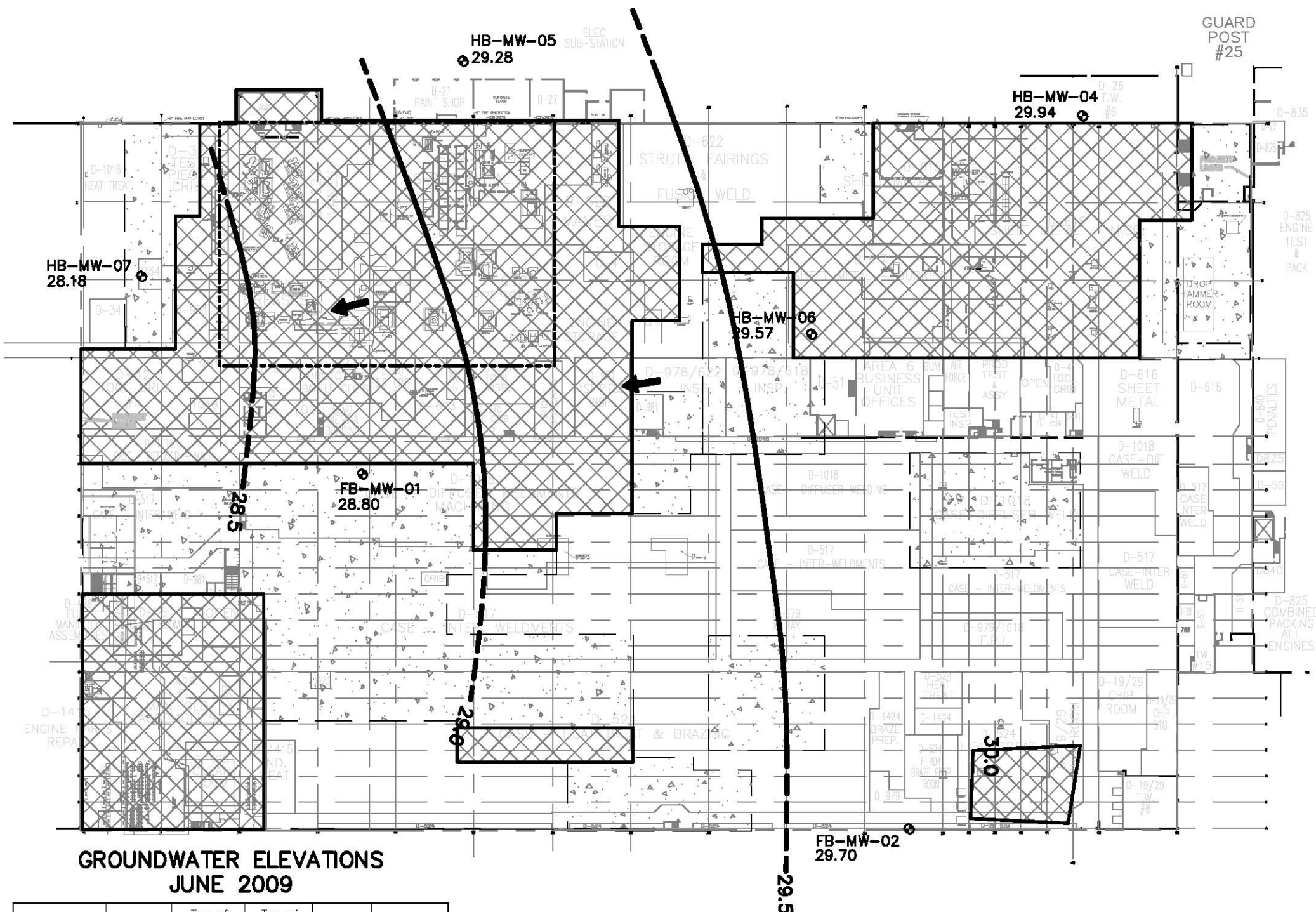
SITE LOCATION MAP

Comm.No.
88UT908

FIGURE 2-1



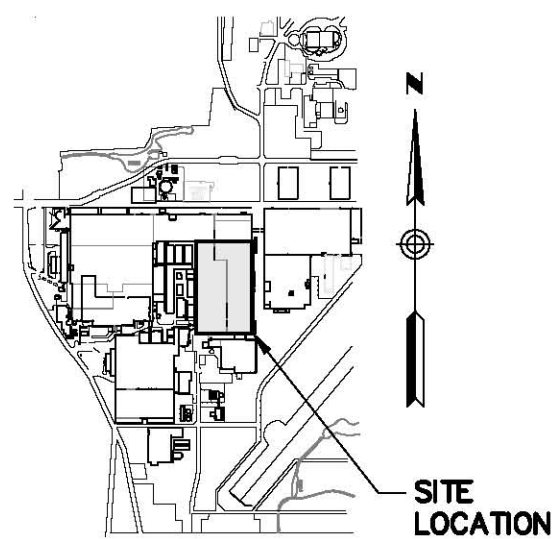
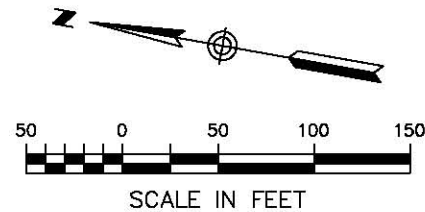




**GROUNDWATER ELEVATIONS
JUNE 2009**

Monitoring Well Identification	Ground Elevation (ft)	Top of Casing Elevation (ft)	Top of Riser Elevation (ft)	Depth to Water ¹ (ft)	Groundwater Elevation ² (ft)
FB-MW-01	38.41	38.39	38.21	9.41	28.80
FB-MW-02	38.47	38.48	38.32	8.62	29.70
HB-MW-04	38.35	38.45	38.08	8.14	29.94
HB-MW-05	39.64	39.67	39.35	10.09	29.26
HB-MW-06	38.48	38.58	38.24	8.67	29.57
HB-MW-07	38.15	38.31	38.16	9.98	28.18

NOTES:
 (1) DEPTH TO WATER WAS MEASURED FROM TOP OF RISER.
 (2) GROUNDWATER ELEVATION FROM TOP OF RISER.
 ft INDICATES FEET.



**KEY MAP
NOT TO SCALE**

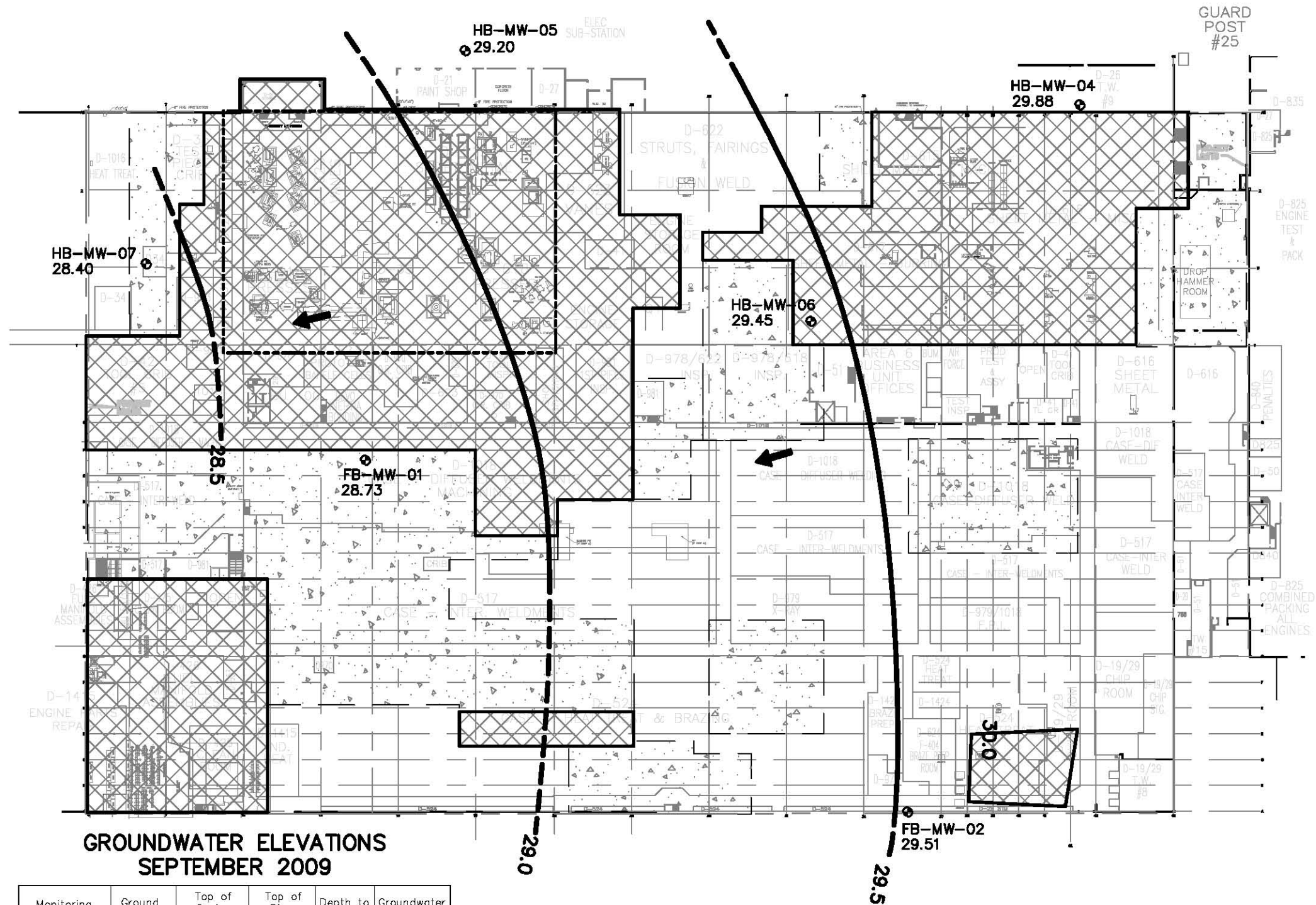
LEGEND

- APPROXIMATE LIMITS OF BITUMINOUS ASPHALT
- APPROXIMATE LIMITS OF PREVIOUS CONCRETE REMOVAL & REPLACED WITH PROCESSED AGGREGATE BASE
- APPROXIMATE LIMITS OF ENGINEERED CONTROL
- MONITORING WELL LOCATION
- GROUNDWATER CONTOUR DASHED WHERE INFERRED
- GROUNDWATER FLOW DIRECTION

2009 ANNUAL POST-REMEDIATION MAINTENANCE AND GROUNDWATER MONITORING REPORT
PRATT & WHITNEY, EAST HARTFORD, CT

**GROUNDWATER CONTOUR MAP
JUNE 2009**

Comm.No. 88UT908	FIGURE 4-3	
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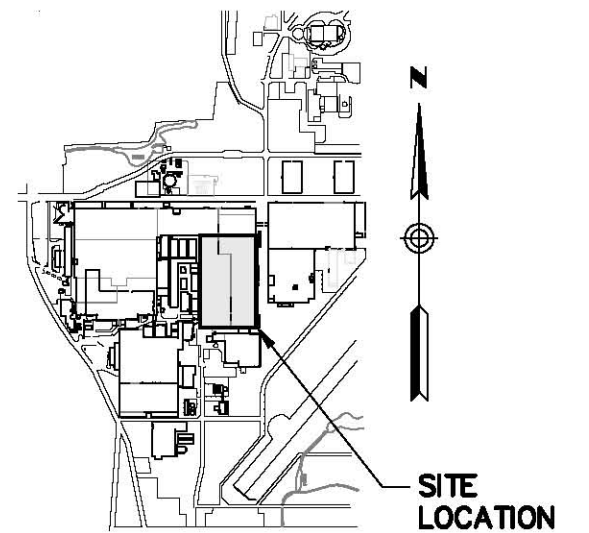


**GROUNDWATER ELEVATIONS
SEPTEMBER 2009**

Monitoring Well Identification	Ground Elevation (ft)	Top of Casing Elevation (ft)	Top of Riser Elevation (ft)	Depth to Water ¹ (ft)	Groundwater Elevation ² (ft)
FB-MW-01	38.41	38.39	38.21	9.48	28.73
FB-MW-02	38.47	38.48	38.32	8.81	29.51
HB-MW-04	38.35	38.45	38.08	8.20	29.88
HB-MW-05	39.64	39.67	39.35	10.15	29.20
HB-MW-06	38.48	38.58	38.24	8.79	29.45
HB-MW-07	38.15	38.31	38.16	9.76	28.40

NOTES:

- (1) DEPTH TO WATER WAS MEASURED FROM TOP OF RISER.
- (2) GROUNDWATER ELEVATION FROM TOP OF RISER.
- ft INDICATES FEET.



**KEY MAP
NOT TO SCALE**

LEGEND

- APPROXIMATE LIMITS OF BITUMINOUS ASPHALT
- APPROXIMATE LIMITS OF PREVIOUS CONCRETE REMOVAL & REPLACED WITH PROCESSED AGGREGATE BASE
- APPROXIMATE LIMITS OF ENGINEERED CONTROL
- MONITORING WELL LOCATION
- GROUNDWATER CONTOUR DASHED WHERE INFERRED
- GROUNDWATER FLOW DIRECTION

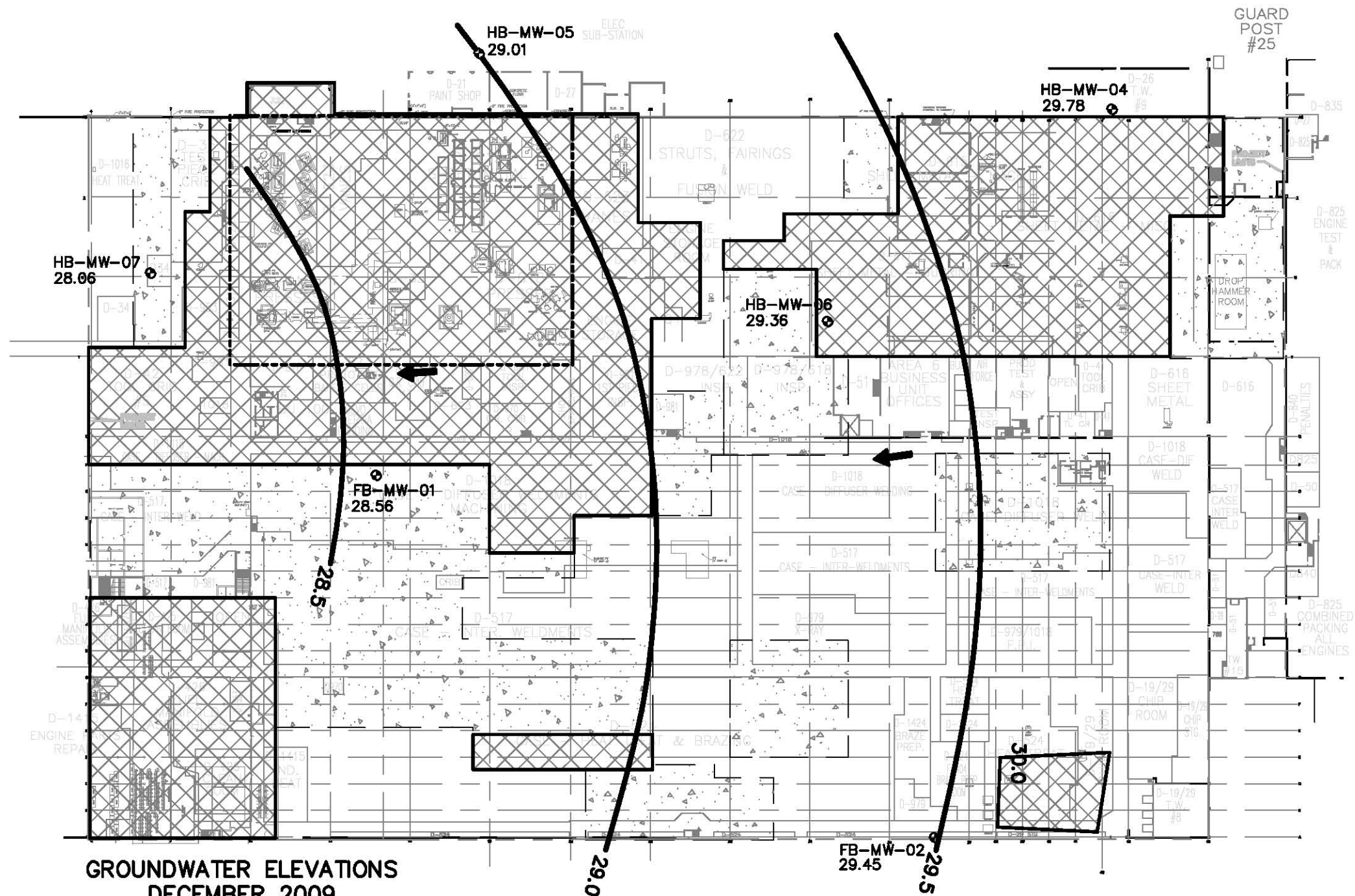
2009 ANNUAL POST-REMEDIATION MAINTENANCE AND GROUNDWATER MONITORING REPORT
PRATT & WHITNEY, EAST HARTFORD, CT

**GROUNDWATER CONTOUR MAP
SEPTEMBER 2009**

Comm.No.
88UT908

FIGURE 4-4



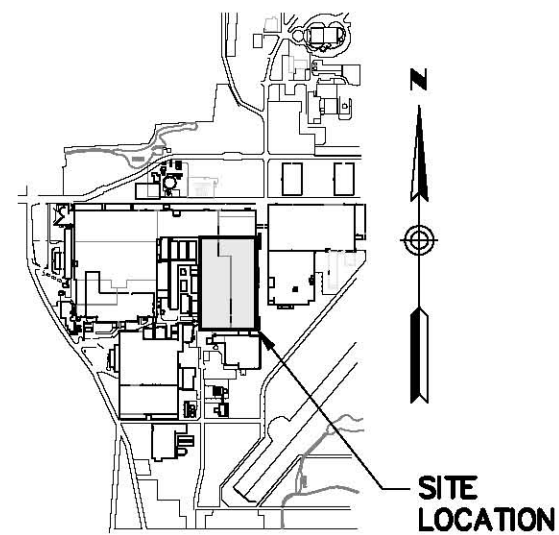


**GROUNDWATER ELEVATIONS
DECEMBER 2009**

Monitoring Well Identification	Ground Elevation (ft)	Top of Casing Elevation (ft)	Top of Riser Elevation (ft)	Depth to Water ¹ (ft)	Groundwater Elevation ² (ft)
FB-MW-01	38.41	38.39	38.21	9.65	28.56
FB-MW-02	38.47	38.48	38.32	8.87	29.45
HB-MW-04	38.35	38.45	38.08	8.30	29.78
HB-MW-05	39.64	39.67	39.35	10.34	29.01
HB-MW-06	38.48	38.58	38.24	8.88	29.36
HB-MW-07	38.15	38.31	38.16	10.10	28.06

NOTES:

- (1) DEPTH TO WATER WAS MEASURED FROM TOP OF RISER.
- (2) GROUNDWATER ELEVATION FROM TOP OF RISER.
- ft INDICATES FEET.



**KEY MAP
NOT TO SCALE**

LEGEND

- APPROXIMATE LIMITS OF BITUMINOUS ASPHALT
- APPROXIMATE LIMITS OF PREVIOUS CONCRETE REMOVAL & REPLACED WITH PROCESSED AGGREGATE BASE
- APPROXIMATE LIMITS OF ENGINEERED CONTROL
- MONITORING WELL LOCATION
- GROUNDWATER CONTOUR DASHED WHERE INFERRED
- GROUNDWATER FLOW DIRECTION

2009 ANNUAL POST-REMEDIATION MAINTENANCE AND GROUNDWATER MONITORING REPORT
PRATT & WHITNEY, EAST HARTFORD, CT

**GROUNDWATER CONTOUR MAP
DECEMBER 2009**

Comm.No.
88UT908

FIGURE 4-5



Appendix A

Copies of Field Paperwork



DAILY FIELD REPORT

Loureiro Engineering Associates, Inc.

LEA Comm. No. 88UT908.001		Page 1 of 11			
Project UTC P&W F&H GW Monitoring 2009		Date 3/12/09			
Location P&W East Hartford, East Hartford, CT					
Client Pratt & Whitney Division - JTot					
Arrived at Site 8:00	Departed from Site 15:30	Vehicle Personal			
Site Activities		Odometer (Start)Re turn			
<input type="checkbox"/> Soil Sampling	<input type="checkbox"/> Geoprobe Work	Current Project Information Last Sample Number Used 1117583 Last Location ID Used Current Location (if not complete) Sampling for See chart Laboratories used Accutest Paperwork & Equipment left at/in Office Site Contact W. Kowitz Contractors on Site Time and place to meet contractors			
<input checked="" type="checkbox"/> Groundwater Sampling	<input type="checkbox"/> Concrete Coring				
<input type="checkbox"/> Surface Water Sampling	<input type="checkbox"/> Construction				
<input type="checkbox"/> Vapor/Air Sampling	<input type="checkbox"/> Waste Management				
<input type="checkbox"/> Concrete Sampling	<input type="checkbox"/> Inspection				
<input type="checkbox"/> Other Sampling	<input type="checkbox"/> Site Walk Over				
<input type="checkbox"/> Other Sampling	<input type="checkbox"/> Surveying				
<input type="checkbox"/> Well Development	<input type="checkbox"/> Other (Describe)				
Non-productive Time					
<input checked="" type="checkbox"/> None	<input type="checkbox"/> Weather				
<input type="checkbox"/> Equipment Breakdown	<input type="checkbox"/> Missing Equipment				
<input type="checkbox"/> Late	<input type="checkbox"/> Other (Describe)				
Quality Assurance Checks		Residuals Disposition			
Yes N/A No		Item Approx. Amount Container ID			
<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Sample labels complete	Soil/Solid			
<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Sample/cooler seals OK	Groundwater	15 gal	714758	
<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	All samples obtained	Decon Fluid			
<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Chains of custody	PPE			
<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	All forms/logs complete	Other			
<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Site condition OK	Weather Conditions Temperature 30-40 Precipitation — Wind 10-25 Comments			
<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Site H&S Plan on site				
<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Instruments calibrated				
Checked By					
Expendable Items Used		Equipment Used			
Qty	Item	LEA Number	Qty	Item	LEA Number
	Bailer, Disposable (specify size)	090		Generator 3500 Watt	153
	Drum, Closed Top 55 Gallon	086		Meter, Conductivity	022
	Filter, In Line	024	2	Meter, pH/Temp YSI Rental	021
X	Miscellaneous Health & Safety Items	060	1	Miscellaneous Small Tools & Equipment	152
	Tubing, 1/2", NOS	007		Pump, Grundfos	073
125'	Tubing, 3/8", NOS 4"	008	2	Pump, Peristaltic (spec. Master or Isco)	040
	Water, Distilled	025		Pump, Submersible	201
				Pump, Watera	038
			2	Turbidimeter	023
			1	VOC Analyzer, Photovac 2020 (PID)	012
			1	Water Level Indicator	028
				Decon Kit	
Field Personnel		Signature			
Nate Emmons		Nate Emmons			
C. Scott Brown					



DAILY FIELD REPORT

Supplemental Sheet

Loureiro Engineering Associates, Inc.

LEA Comm. No. 88UT908.001
Project UTC P&W F&H GW Monitoring 2009
Location P&W East Hartford, East Hartford, CT
Client Pratt & Whitney Division - JTot

Page 2 of 11
Date 3/12/09

Description of Site Activities

8:00 on site started setup - Calibrate
8:20 Start sampling with Bill Greer. Helping Bill get started while
waiting for Brisson to help Bill. Collected water levels
9:00 started sampling myself.
12:00 talked to Benny about pick up
14:30 finished sampling
15:00 meet Benny for pick up. - Bill taking water to WT
15:15 off site

NE

Field Personnel Nate Emmons
C. Scott Brown

Signature
Nate Emmons



Page 3 of 11
Date 3/13/04

LEA Comm. No.	88UT908.001
Project	UTC P&W F&H GW Monitoring 2009
Location	P&W East Hartford, East Hartford, CT
Client	Pratt & Whitney Division - JTot

Signature *Mark Gurnea*



Loureiro Engineering Associates, Inc.

DAILY FIELD REPORT CALIBRATION RECORD

LEA Comm. No. **88UT908.001**
Project **UTC P&W F&H GW Monitoring 2009**
Location **P&W East Hartford, East Hartford, CT**
Client **Pratt & Whitney Division - JTot**

Page 4 of 4
Date 3/12/09

pH Meter/Serial #	<u>0061176 AA</u>						
	Time	pH 4.01	pH 7.00	pH 10.01	Spec. Cond.	ORP	DO
Initial Calibration	<u>8:30</u>	<u>4.0</u>	<u>7.0</u>	<u>10.0</u>	<u>1800</u>	<u>109</u>	<u>/</u>
Calibration Check							
Calibration Check							

Turbidity Meter/Serial #	<u>LEA# 3522 # 3514</u>				
	Time	0 NTU	20 NTU	100 NTU	800 NTU
Initial Calibration	<u>9:00</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	
Calibration Check	<u>8:20</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	
Calibration Check					

PID Meter/Serial #				
	Time	Standard	Meter Reading	Zero with
Initial Calibration				
Calibration Check				
Calibration Check				

Balance/Serial #			
	Time	Standard	Balance
Initial Calibration			
Calibration Check			
Calibration Check			

Comments

Field Personnel Nate Emmons
C. Scott Brown

Signature
Nate Emmons



LEA Comm. No.	88UT908.001
Project	UTC P&W F&H GW Monitoring 2009
Location	P&W East Hartford, East Hartford, CT
Client	Pratt & Whitney Division - JTot

Page 5 of 11
Date 3/12/09

Field Personnel	Nate Emmons C. Scott Brown	Signature <i>Nate Emmons</i>
-----------------	-------------------------------	---------------------------------



Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD

LOW FLOW WELL SAMPLE

LEA Comm. No. **88UT908.001** Page 6 of 11
 Project **UTC P&W F&H GW Monitoring 2009** Date 3/12/09
 Location **P&W East Hartford, East Hartford, CT** Sample Time 10:40
 Client **Pratt & Whitney Division - JTot**

Monitoring Well Number HB-mw-04 Sample Number(s) 1117577 1117577wf

Initial Field Data and Measurements

Depth of Well 13.17 Reference Used T of C
 Depth to Water 7.95 PID/FID Reading _____
 Height of Column _____ Interface Yes ☒ No ☐ If yes, Depth _____ Lighter / Heavier _____
 Well Casing Diameter 1 1/2 Material PVC General Condition OK Bad
 Protector Road Box / Stickup Casing Secure ☒
 Ground to Reference _____ Collar Intact ☒
 Comments _____ Cover Locked ☒
 Other (describe) _____

Development Information

Parameter	Depth to Water	Pump Setting	Purge Rate (mL/min)	Cum. Liters Purged (L)	Temp (C)	Spec. Cond. (uS/cm)	pH (SU)	ORP (Eh)	DO (mg/L)	Turbidity (NTU)	Comment
Time											
<u>9:10</u>	<u>7.95</u>	<u>300</u>	<u>100</u>								
<u>9:30</u>	<u>8.03</u>			<u>2.0</u>	<u>8.40</u>	<u>429</u>	<u>7.60</u>	<u>210.1</u>	<u>3.33</u>	<u>22.5</u>	
<u>9:40</u>	<u>8.03</u>			<u>3.0</u>	<u>8.31</u>	<u>433</u>	<u>7.59</u>	<u>195.6</u>	<u>2.84</u>	<u>17.3</u>	
<u>9:50</u>	<u>8.03</u>			<u>4.0</u>	<u>8.20</u>	<u>441</u>	<u>7.61</u>	<u>189.1</u>	<u>2.20</u>	<u>11.7</u>	
<u>10:00</u>	<u>8.03</u>			<u>5.0</u>	<u>8.24</u>	<u>436</u>	<u>7.59</u>	<u>189.7</u>	<u>1.99</u>	<u>7.84</u>	
<u>10:10</u>	<u>8.03</u>			<u>6.0</u>	<u>8.23</u>	<u>430</u>	<u>7.58</u>	<u>189.5</u>	<u>1.97</u>	<u>6.40</u>	
<u>10:20</u>	<u>8.03</u>			<u>7.0</u>	<u>7.77</u>	<u>410</u>	<u>7.44</u>	<u>183.0</u>	<u>1.54</u>	<u>5.51</u>	
<u>10:30</u>	<u>8.03</u>			<u>8.0</u>	<u>7.90</u>	<u>410</u>	<u>7.44</u>	<u>185.1</u>	<u>1.48</u>	<u>4.62</u>	
<u>10:35</u>	<u>8.03</u>	<u>300</u>	<u>100</u>	<u>8.5</u>	<u>7.89</u>	<u>411</u>	<u>7.44</u>	<u>185.3</u>	<u>1.49</u>	<u>4.43</u>	
<u>10:40</u>	<u>8.03</u>	<u>300</u>	<u>100</u>	<u>9.5</u>	<u>7.89</u>	<u>411</u>	<u>7.44</u>	<u>185.3</u>	<u>1.49</u>	<u>4.33</u>	
<u>Sample</u>											

Development Method Peristaltic Pump / Bailer / Inertial Pump / Other

Sample Field Treatment *If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!*

Field Decontamination? Yes / No If Yes, with what? Meth on WLI
 Waste Container ID 714758

Additional Comments

Field Personnel Nate Emmons
C. Scott Brown

Signature Nate Emmons



Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD LOW FLOW WELL SAMPLE

LEA Comm. No. 88UT908.001
Project UTC P&W F&H GW Monitoring 2009
Location P&W East Hartford, East Hartford, CT
Client Pratt & Whitney Division - JTot

Page 7 of 11
Date 3/12/09
Sample Time 11:56

Monitoring Well Number HB-MW-07 Sample Number(s) 1117575 111757504

Initial Field Data and Measurements

Depth of Well 14.47 Reference Used T o f C
Depth to Water 9.83 PID/FID Reading —
Height of Column Interface N/A Yes / No If yes, Depth Lighter / Heavier
Well Casing Diameter 1.5" Material PVC General Condition OK Bad
Protector Road Box / Stickup Casing Secure X
Ground to Reference Collar Intact X
Comments Cover Locked X
Other (describe)

Development Information

Parameter Time	Depth to Water	Pump Setting	Purge Rate (mL/min)	Cum. Liters Purged (L)	Temp (C)	Spec. Cond. (uS/cm)	pH (SU)	ORP (Eh)	DO (mg/L)	Turbidity (NTU)	Comment
1045	9.83	300	160	1.6	12.84	308	6.60	251.8	2.14	3.81	
1055	9.85	300	160	1.6	13.00	308	6.60	245.8	1.70	3.03	
1105	9.84	300	160	4.8	12.99	305	6.57	239.2	1.63	2.87	
1115	9.86	300	160	—	12.98	302	6.55	237.0	1.50	2.68	
1125	9.87	300	160	8.0	12.87	303	6.55	235.5	1.54	2.45	
1135	9.88	300	160	—	13.13	301	6.53	233.8	1.61	2.46	
1145	9.88	300	160	10.4	13.05	301	6.54	232.8	1.54	2.50	
1155	9.88	300	160	14.2	13.01	303	6.52	232.5	1.53	2.49	
1156	SAMPLE										

Development Method Peristaltic Pump / Bailer / Inertial Pump / Other

Sample Field Treatment If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!

Field Decontamination? Yes / No If Yes, with what?

Waste Container ID 714758

Additional Comments

purge set @ 12.47 from T o f C

Field Personnel Nate Emmons
C. Scott Brown

Will Greer

Signature

Waste ID 6104

FIELD SAMPLING RECORD
LOW FLOW WELL SAMPLE

LEA Comm. No.	88UT908.001	Page	95	of	11
Project	UTC P&W F&H GW Monitoring 2009	Date	3/12/09		
Location	P&W East Hartford, East Hartford, CT	Sample Time	13:00		
Client	Pratt & Whitney Division - JTot				

Monitoring Well Number HB-mw-05 Sample Number(s) 1117578 1117578 JF

Initial Field Data and Measurements

Depth of Well 14.40 Reference Used Taf C
 Depth to Water 10.11 PID/FID Reading _____
 Height of Column _____ Interface Yes (No) If yes, Depth _____ Lighter / Heavier _____
 Well Casing Diameter 1 1/2 Material PVC General Condition OK _____ Bad _____
 Protector Road Box / Stickup Casing Secure ☒
 Ground to Reference _____ Collar Intact ☒
 Comments _____ Cover Locked ☒
 Other (describe) _____

Development Information

[illegible]

Development Method	Peristaltic Pump / Bailer / Inertial Pump / Other		
Sample Field Treatment	If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!		
Field Decontamination?	Yes / No	If Yes, with what?	Meth on WLI
Waste Container ID	714758		
Additional Comments			

Field Personnel	Nate Emmons C. Scott Brown	Signature <i>Nate Emmons</i>
-----------------	-------------------------------	---------------------------------

FIELD SAMPLING RECORD
LOW FLOW WELL SAMPLE

LEA Comm. No.	88UT908.001	Page	9	of	11
Project	UTC P&W F&H GW Monitoring 2009	Date	3/12/09		
Location	P&W East Hartford, East Hartford, CT	Sample Time	14:40		
Client	Pratt & Whitney Division - JTot				

Monitoring Well Number FB-mw-02 Sample Number(s) 1117579 1117579 vf

Initial Field Data and Measurements

Depth of Well _____ Reference Used TafC
 Depth to Water 8.45 PID/FID Reading _____
 Height of Column _____ Interface Yes (No) If yes, Depth _____ Lighter / Heavier _____
 Well Casing Diameter 1 1/2 Material PVC General Condition OK ✓ Bad _____
 Protector Road Box / Stickup Casing Secure ✓
 Ground to Reference _____ Collar Intact ✓
 Comments _____ Cover Locked ✓
 Other (describe) _____

Development Information

[illegible]Development Method ☒ Peristaltic Pump ☐ Bailer ☐ Inertial Pump ☐ Other

Sample Field Treatment *If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!*

Field Decontamination? Yes / No If Yes, with what? Meth on WLI
Waste Container ID 714758

Additional Comments

Field Personnel	Nate Emmons
	C. Scott Brown

Signature
Nate Finner

FIELD SAMPLING RECORD
LOW FLOW WELL SAMPLE

LEA Comm. No.	88UT908.001	Page	10	of	11
Project	UTC P&W F&H GW Monitoring 2009	Date	3/12/09		
Location	P&W East Hartford, East Hartford, CT	Sample Time	14:19		
Client	Pratt & Whitney Division - JTot				

Monitoring Well Number FB-MW-01 Sample Number(s) 1117576

11175810f
11175760f

Initial Field Data and Measurements

Depth of Well 13.67' Reference Used T of C
 Depth to Water 9.43' PID/FID Reading -
 Height of Column 4.24' Interface N/A Yes / No If yes, Depth Lighter / Heavier

Well Casing Diameter	Material	PVC	General Condition	OK	Bad
Protector	Road Box	Stickup	Casing Secure	✓	
Ground to Reference			Collar Intact	✓	
Comments			Cover Locked	✓	
			Other (describe)		

Development Information

[illegible]

Development Method Peristaltic Pump / Bailer / Inertial Pump / Other

Sample Field Treatment *If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!*

Field Decontamination?	Yes / No	If Yes, with what?

Waste Container ID Q74758

Additional Comments

Field Personnel	Nate Emmons
	C. Scott Brown

Signature

FIELD SAMPLING RECORD
LOW FLOW WELL SAMPLE

LEA Comm. No.	88UT908.001	Page	11	of	11
Project	UTC P&W F&H GW Monitoring 2009	Date	3/12/09		
Location	P&W East Hartford, East Hartford, CT	Sample Time	9:35		
Client	Pratt & Whitney Division - JTot				

Monitoring Well Number HB-MW-06 Sample Number(s) 1117574

Initial Field Data and Measurements

Depth of Well 13.58 Reference Used T of C
 Depth to Water 8.61 PID/FID Reading _____
 Height of Column _____ Interface Yes / No No If yes, Depth _____ Lighter / Heavier _____
 Well Casing Diameter 1 1/2 Material PVC General Condition OK Bad
 Protector Road Box / Stickup Casing Secure ☒ ☐
 Ground to Reference Collar Intact ☒ ☐
 Comments Cover Locked ☒ ☐
 Other (describe) _____

Development Information

[illegible]Development Method Peristaltic Pump / Bailer / Inertial Pump / Other

Sample Field Treatment *If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!*

Field Decontamination? Yes/No If Yes, with what? Meth on WLI
Waste Container ID 71475

Additional Comments

Field Personnel	Nate Emmons	<i>Signature</i>
	C. Scott Brown	

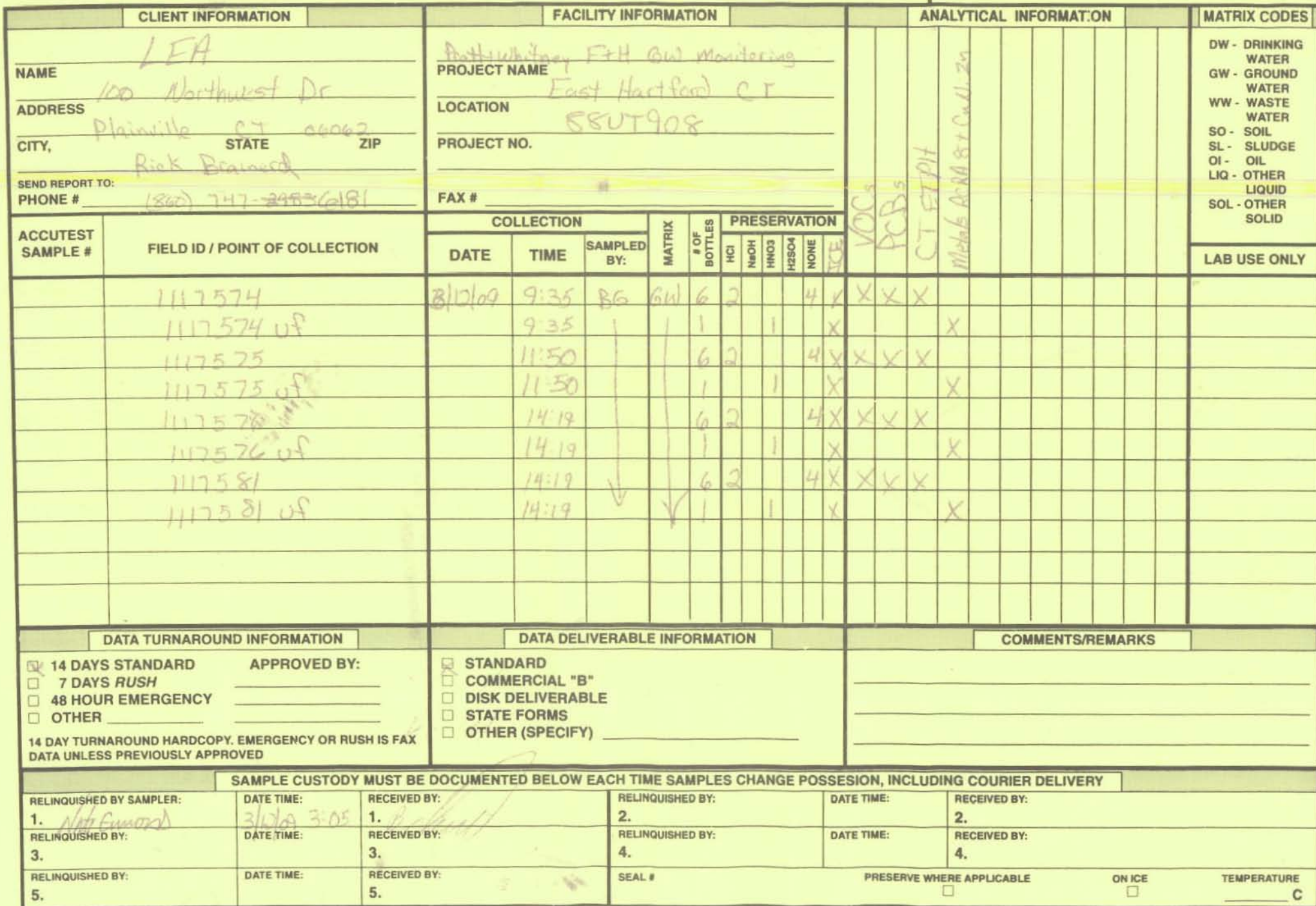


CHAIN OF CUSTODY

TEL: 508-481-6200 • FAX: 508-481-7753

ACCUTEST QUOTE #:

CLIENT INFORMATION			FACILITY INFORMATION			ANALYTICAL INFORMATION								MATRIX CODES	
NAME LEA			PROJECT NAME P+W, F+H GW Monitoring											DW - DRINKING WATER	
ADDRESS 100 Northwest Dr			LOCATION Pratt Whitney East Hartford											GW - GROUND WATER	
CITY, STATE ZIP Plainville CT 06062			PROJECT NO. 88UT908											WW - WASTE WATER	
SEND REPORT TO: PHONE # (860) 410-3018			FAX #											SO - SOIL	
ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION			MATRIX	# OF BOTTLES	PRESERVATION							LAB USE ONLY	
		DATE	TIME	SAMPLED BY:			HCl	NaOH	HNO ₃	H ₂ SO ₄	NONE	ICE			
	1117577	3/12/04	10:40	NE	GW	6	2				4	X	X	X	
	1117577 UF		10:40			1	1				X				X
	1117578		13:00			6	2				4	X	X	X	
	1117578 UF		13:00			1		1			X				X
	1117579 UF		14:40			1		1			X				X
	1117579		14:40			6	2				4	X	X	X	
	1117583		9:00			1	1				X	X			
	1117582		14:30			6	2				4	X	X	X	
	1117582 UF		14:30			1		1							X
DATA TURNAROUND INFORMATION			DATA DELIVERABLE INFORMATION			COMMENTS/REMARKS									
<input checked="" type="checkbox"/> 14 DAYS STANDARD APPROVED BY: _____ <input type="checkbox"/> 7 DAYS RUSH <input type="checkbox"/> 48 HOUR EMERGENCY <input type="checkbox"/> OTHER			<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> COMMERCIAL "B" <input type="checkbox"/> DISK DELIVERABLE <input type="checkbox"/> STATE FORMS <input type="checkbox"/> OTHER (SPECIFY)												
14 DAY TURNAROUND HARDCOPY. EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED															
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY															
RELINQUISHED BY SAMPLER:		DATE TIME:		RECEIVED BY:		RELINQUISHED BY:		DATE TIME:		RECEIVED BY:					
1. Nate Emmerd		3/12/04 3:05		1. [Signature]		2.				2.					
RELINQUISHED BY:		DATE TIME:		RECEIVED BY:		RELINQUISHED BY:		DATE TIME:		RECEIVED BY:					
3.				3.		4.				4.					
RELINQUISHED BY:		DATE TIME:		RECEIVED BY:		SEAL #		PRESERVE WHERE APPLICABLE		ON ICE		TEMPERATURE			
5.				5.				<input type="checkbox"/>		<input type="checkbox"/>		C			





DAILY FIELD REPORT

Loureiro Engineering Associates, Inc.

LEA Comm. No. 88UT908.001
Project UTC P&W F&H GW Monitoring 2009
Location P&W East Hartford, East Hartford, CT
Client Pratt & Whitney Division - JTot

Page of
Date 6/18/09

Arrived at Site 7:45 Departed from Site 3:30 Vehicle Personnel

Site Activities

- | | |
|--|---|
| <input checked="" type="checkbox"/> Soil Sampling | <input type="checkbox"/> Geoprobe Work |
| <input checked="" type="checkbox"/> Groundwater Sampling | <input type="checkbox"/> Concrete Coring |
| <input type="checkbox"/> Surface Water Sampling | <input type="checkbox"/> Construction |
| <input type="checkbox"/> Vapor/Air Sampling | <input type="checkbox"/> Waste Management |
| <input type="checkbox"/> Concrete Sampling | |
| <input type="checkbox"/> Other Sampling | <input type="checkbox"/> Inspection |
| <input type="checkbox"/> Other Sampling | <input type="checkbox"/> Site Walk Over |
| | <input type="checkbox"/> Surveying |
| <input type="checkbox"/> Well Development | <input type="checkbox"/> Other (Describe) |

Current Project Information

Odrometer (Start) _____ Return _____
Last Sample Number Used 1122882
Last Location ID Used _____
Current Location (if not complete) _____
Sampling for See chain
Laboratories used Accutest
Paperwork & Equipment left at/in office
Site Contact Billard
Contractors on Site _____

Non-productive Time

- | | |
|--|--|
| <input checked="" type="checkbox"/> None | <input type="checkbox"/> Weather |
| <input type="checkbox"/> Equipment Breakdown | <input type="checkbox"/> Missing Equipment |
| <input type="checkbox"/> Late | <input type="checkbox"/> Other (Describe) |

Time and place to meet contractors _____

Quality Assurance Checks

- | Yes | N/A | No |
|-------------------------------------|--------------------------|--------------------------|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
- Sample labels complete
Sample/cooler seals OK
All samples obtained
Chains of custody
All forms/logs complete
Site condition OK
Site H&S Plan on site
Instruments calibrated

Residuals Disposition

Item	Approx. Amount	Container ID
Soil/Solid		
Groundwater	17gal	714758
Decon Fluid		
PPE		
Other		

Weather Conditions

Temperature 60's Precipitation Rain Wind light
Comments _____

Checked By _____

Expendable Items Used

Qty	Item	LEA Number
	Bailer, Disposable (specify size)	090
	Drum, Closed Top 55 Gallon	086
	Filter, In Line	024
1	Miscellaneous Health & Safety Items	060
	Tubing, 1/2", NOS	007
125	Tubing, 3/8", NOS 1/4"	008
1	Water, Distilled	025

Equipment Used

Qty	Item	LEA Number
	Generator 3500 Watt	153
	Meter, Conductivity	022
	Meter, pH/Temp	021
1	Miscellaneous Small Tools & Equipment	152
	Pump, Grundfos	073
2	Pump, Peristaltic (spec. Master or Isco)	040
	Pump, Submersible	201
	Pump, Watera	038
2	Turbidimeter	023
1	VOC Analyzer, Photovac 2020 (PID)	012
2	Water Level Indicator	028
2	Water Quality Meter w/Flow Cell	070

Field Personnel Nate Emmons

Signature
Nate Emmons



Loureiro Engineering Associates, Inc.

DAILY FIELD REPORT

Supplemental Sheet

Job No. 88UT908.001
Project UTC P&W F&H GW Monitoring 2009
Location P&W East Hartford, East Hartford, CT
Client Pratt & Whitney Division - JTot

Page ____ of ____
Date 6/18/09

Description of Site Activities

7:45 On Site
8:15 Calibrate, Work Plan, Paperwork
14:00 Start Setting up to Sample
14:30 finished Sampling
15:30 waste off site.

X/E

Field Personnel

Nate Emmons

Signature

Nate Emmons



Loureiro Engineering Associates, Inc.

**DAILY FIELD REPORT
CALIBRATION RECORD**

Job No.	88UT908.001						Page	of
Project	UTC P&W F&H GW Monitoring 2009						Date	6/18/09
Location	P&W East Hartford, East Hartford, CT							
Client	Pratt & Whitney Division - JTot							
pH Meter/Serial #								
	Time	pH 4.01	pH 7.00	pH 10.01	Spec. Cond.	ORP	DO	
Initial Calibration	0100036 AC	4.0	7.0	10.0%	1000	109		
Calibration Check	00L 1176AA	4.0	7.0	10.0	1000	109		
Calibration Check								
Turbidity Meter/Serial # LEA #s 3520 + 3522								
	Time	0 NTU	20 NTU	100 NTU	800 NTU			
Initial Calibration	8:30	/	/	/	/			
Calibration Check	8:30	/	/	/	/			
Calibration Check								
PID Meter/Serial #								
	Time	Standard	Meter Reading	Zero with				
Initial Calibration								
Calibration Check								
Calibration Check								
Balance/Serial #								
	Time	Standard	Balance					
Initial Calibration								
Calibration Check								
Calibration Check								
Comments								
Field Personnel	Nate Emmons						Signature	

Loureiro Engineering Associates, Inc.



Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD

LOW FLOW WELL SAMPLE

LEA Comm. No. 88UT908.001 Page 1 of 1
 Project UTC P&W F&H GW Monitoring 2009 Date 6/18/89
 Location P&W East Hartford, East Hartford, CT Sample Time 1200
 Client Pratt & Whitney Division - JTot

Monitoring Well Number HB-mw-04 Sample Number(s) 1122877 1122877 of

Initial Field Data and Measurements

Depth of Well 13.35 Reference Used T of R
 Depth to Water 8.14 PID/FID Reading _____
 Height of Column _____ Interface Yes / No If yes, Depth _____ Lighter / Heavier _____
 Well Casing Diameter 1 1/2" Material PVC General Condition OK ☒ Bad ☐
 Protector Road Box Stickup Casing Secure ☒
 Ground to Reference _____ Collar Intact ☒
 Comments _____ Cover Locked ☒
 Other (describe) _____

Development Information

Parameter	Depth to Water	Pump Setting	Purge Rate (mL/min)	Cum. Liters Purged (L)	Temp (C)	Spec. Cond. (uS/cm)	pH (SU)	ORP (Eh)	DO (mg/L)	Turbidity (NTU)	Comment
Time											
10:15	8.14	300	150								Pumping
10:35	8.20			3.00	16.27	443	7.46	86.1	2.42	9.52	
10:45	8.20		150	4.50	15.97	480	7.42	224.7	1.52	5.67	
10:55	8.20			6.00	16.01	486	7.40	256.7	1.19	4.44	
11:05	8.20		150	7.50	15.89	494	7.39	287.9	1.01	3.51	
11:15				9.00	18.97	497	7.39	303.1	0.98	3.33	
11:25			150	10.50	15.95	500	7.38	315.1	0.90	3.17	
11:35				12.00	15.96	560	7.37	335.7	0.83	2.87	
11:46			150	12.75	15.94	500	7.37	339.4	0.80	2.56	
11:45				13.50	15.95	501	7.37	340.3	0.79	2.76	
11:50			150	14.25	15.94	501	7.37	340.7	0.79	2.39	
11:55				15.00	15.93	500	7.37	340.9	0.79	2.45	
12:00	8.20	300	150	15.75	15.94	500	7.38	340.7	0.78	2.40	Sample

Development Method Peristaltic Pump / Bailer / Inertial Pump / Other _____

Sample Field Treatment *If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!*

Field Decontamination? Yes / No If Yes, with what? _____

Waste Container ID _____

Additional Comments

Field Personnel Nate Emmons

Signature Nate Emmons



Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD

LOW FLOW WELL SAMPLE

LEA Comm. No. 88UT908.001 Page of
 Project UTC P&W F&H GW Monitoring 2009 Date 6/18/09
 Location P&W East Hartford, East Hartford, CT Sample Time 13:55
 Client Pratt & Whitney Division - JTot

Monitoring Well Number HB-mw-05 Sample Number(s) 1122878 1122878 uf

Initial Field Data and Measurements

Depth of Well 14.55 Reference Used Taf R
 Depth to Water 10.09 PID/FID Reading
 Height of Column Interface Yes ☒ No ☐ If yes, Depth Lighter / Heavier
 Well Casing Diameter 1 1/2" Material PVC General Condition OK ☒ Bad ☐
 Protector Road Box / Stickup Casing Secure ☒
 Ground to Reference Collar Intact ☒
 Comments Cover Locked ☒
 Other (describe)

Development Information

Parameter Time	Depth to Water	Pump Setting	Purge Rate (mL/min)	Cum. Liters Purged (L)	Temp (C)	Spec. Cond. (uS/cm)	pH (SU)	ORP (Eh)	DO (mg/L)	Turbidity (NTU)	Comment
12:40	10.09	300	150								Pumping
12:50	10.11		150	1.50	18.31	1592	6.28	113.3	9.18	48.7	
13:00	10.11		150	3.00	18.23	1442	6.22	103.8	8.60	20.3	
13:10	10.11		150	4.50	18.21	1387	6.17	111.6	8.43	9.77	
13:20	10.11		100	6.00	18.18	1335	6.14	117.8	8.32	4.88	
13:25	10.11		100	6.75	18.17	1325	6.14	118.2	8.48	4.75	
13:30	10.11		130	7.50	18.18	1320	6.12	120.4	8.31	4.34	
13:35	10.11		150	8.25	18.19	1300	6.10	122.5	8.23	4.01	
13:40	10.11		150	9.00	18.20	1298	6.09	124.1	8.22	3.76	
13:45	10.11		150	9.75	18.19	1296	6.09	125.3	8.21	2.58	
13:50	10.11		150	10.50	18.20	1290	6.09	125.7	8.20	2.45	
13:55	10.11	300	150	11.25	18.19	1294	6.09	125.4	8.20	2.09	
Sample											

Development Method Peristaltic Pump / Bailer / Inertial Pump / Other

Sample Field Treatment *If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!*

Field Decontamination? Yes / No If Yes, with what?

Waste Container ID

Additional Comments

Field Personnel Nate Emmons

Signature Nate Emmons

FIELD SAMPLING RECORD
LOW FLOW WELL SAMPLE

LEA Comm. No.		88UT908.001	Page _____ of _____								
Project		UTC P&W F&H GW Monitoring 2009		Date <u>6/18/09</u>							
Location		P&W East Hartford, East Hartford, CT		Sample Time <u>13:30</u>							
Client		Pratt & Whitney Division - JTot		1122440 1122490vf							
Monitoring Well Number		FAB-MW-02	Sample Number(s) 1122875 1122875vf								
Initial Field Data and Measurements											
Depth of Well		<u>13.56</u>	Reference Used <u>T.O.C</u>								
Depth to Water		<u>4.62</u>	PID/FID Reading <u>0.0</u>								
Height of Column		<u>4.94</u>	Interface Yes / <input checked="" type="radio"/> No If yes, Depth _____ Lighter / Heavier _____								
Well Casing Diameter		<u>1.5"</u>	Material <u>PVC</u>								
Protector		<u>Road Box / Stickup</u>	General Condition OK Bad								
Ground to Reference		<u>Toc</u>	Casing Secure <input checked="" type="checkbox"/>								
Comments			Collar Intact <input checked="" type="checkbox"/>								
			Cover Locked <input checked="" type="checkbox"/>								
			Other (describe)								
Development Information											
Parameter Time	Depth to Water	Pump Setting	Purge Rate (mL/min)	Cum. Liters Purged (L)	Temp (C)	Spec. Cond. (uS/cm)	pH (SU)	ORP (Eh)	DO (mg/L)	Turbidity (NTU)	Comment
12:10	8.66	300	125	← start Purging →							
12:20	8.65	300	125	1.25	16.58	215	6.34	80.4	51.3	6.75	
12:30	8.65	300	125	2.50	16.61	214	6.32	69.2	49.2	5.99	
12:40	8.65	300	125	3.75	16.65	210	6.24	63.1	57.6	5.10	
12:50	8.64	300	125	5.00	16.71	212	6.29	61.4	52.2	4.78	
13:00	8.64	300	125	6.25	16.64	213	6.29	55.9	50.9	4.23	
13:10	8.64	300	125	7.50	16.60	213	6.29	51.0	47.6	3.75	
13:20	8.64	300	125	8.75	16.57	216	6.28	47.6	45.3	3.15	
13:23	8.64	300	125	9.25	16.60	217	6.30	45.3	44.2	2.89	
13:26	8.64	300	125	9.65	16.58	218	6.28	43.1	42.8	2.75	
13:30	8.64	300	125	10.05	16.56	218	6.28	41.9	40.0	2.66	sampled
Development Method <u>Peristaltic Pump</u> / Bailer / Inertial Pump / Other _____ Sample Field Treatment <i>If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!</i> Field Decontamination? Yes / <input checked="" type="checkbox"/> No If Yes, with what? _____ Waste Container ID <u>714758</u> Additional Comments <u>Dup on well # 1122440 and 1122490vf</u>											
Field Personnel		<u>Nate Emmons</u>		Signature							
		<u>Scott Ryan</u>		<u>Scott Ryan</u>							

FIELD SAMPLING RECORD
LOW FLOW WELL SAMPLE

LEA Comm. No.	88UT908.001	Page ____ of ____
Project	UTC P&W F&H GW Monitoring 2009	Date <u>6/14/09</u>
Location	P&W East Hartford, East Hartford, CT	Sample Time <u>11:10</u>
Client	Pratt & Whitney Division - JTot	

Monitoring Well Number FB-MW-01 Sample Number(s) 1122874 1122874JF

Initial Field Data and Measurements

Depth of Well	13.81	Reference Used	TOL		
Depth to Water	9.41	PID/FID Reading	0.0		
Height of Column	4.40	Interface	Yes / <input checked="" type="radio"/> No	If yes, Depth	Lighter / Heavier
Well Casing Diameter	1.5 ¹¹	Material	PVL	General Condition	OK Bad
Protector	Road Box / Stickup			Casing Secure	<input checked="" type="checkbox"/> <input type="checkbox"/>
Ground to Reference	TOL			Collar Intact	<input checked="" type="checkbox"/> <input type="checkbox"/>
Comments				Cover Locked	<input checked="" type="checkbox"/> <input type="checkbox"/>
				Other (describe)	<input type="checkbox"/> <input type="checkbox"/>

Development Information

Parameter Time	Depth to Water	Pump Setting	Purge Rate (mL/min)	Cum. Liters Purged (L)	Temp (C)	Spec. Cond. (uS/cm)	pH (SU)	ORP (Eh)	DO (mg/L)	Turbidity (NTU)	Comment
10:10	9.45	300	100	←	start						
10:20	9.44	300	100	1.0L	16.81	355	5.82	86.7	18.5	7.56	
10:30	9.44	300	100	2.0L	16.44	360	5.82	78.2	16.3	6.10	
10:40	9.44	300	100	3.0L	16.43	366	5.43	65.4	12.7	5.33	
10:50	9.44	300	100	4.0L	16.77	369	5.83	60.5	10.6	4.83	
11:00	9.44	300	100	5.0L	16.77	371	5.83	58.1	10.2	4.07	
11:03	9.44	300	100	5.3L	16.78	372	5.83	57.6	9.9	3.99	
11:06	9.43	300	100	5.6L	16.77	372	5.84	56.9	9.4	3.91	
11:10	9.44	300	100	6.0L	16.77	374	5.84	56.2	9.1	3.86	

Development Method	<u>Pieristatic Pump / Bailer / Inertial Pump / Other</u>
--------------------	--

Sample Field Treatment *If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!*

Field Decontamination? Yes / No If Yes, with what?

Waste Container ID 714758

Additional Comments

Field Personnel	Nate Emmons
-----------------	-------------

Signature

5/7/20



LEA Comm. No.	88UT908.001
Project	UTC P&W F&H GW Monitoring 2009
Location	P&W East Hartford, East Hartford, CT
Client	Pratt & Whitney Division - JTot

Page _____ of _____
Date 6/18/09
Sample Time 9:30

Monitoring Well Number *H/3 - MW-07* Sample Number(s) *1122873*

11224730f

Depth of Well	15.54	Reference Used	TOL	
Depth to Water	9.98	PID/FID Reading	0.0	
Height of Column	5.56	Interface	Yes / No	If yes, Depth Lighter / Heavier
Well Casing Diameter	1.5"	Material	PVC	General Condition OK Bad
Protector	Road Box / Stickup			Casing Secure ✓
Ground to Reference	TOL			Collar Intact ✓
Comments				Cover Locked ✓
				Other (describe)

[illegible]Development Method Peristaltic Pump / Bailer / Inertial Pump / Other

Sample Field Treatment *If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!*

Field Decontamination? Yes / ~~No~~ If Yes, with what?
Waste Container ID 714758

Additional Comments

Field Personnel	Nate Emmons
-----------------	-------------

Scott Brown

Signature

CLIENT INFORMATION			FACILITY INFORMATION				ANALYTICAL INFORMATION										MATRIX CODES								
NAME LEA ADDRESS 100 Northwest Dr CITY, STATE, ZIP Plainville CT 06062 SEND REPORT TO: PHONE # (860) 747-6181			PROJECT NAME F+H Groundwater Monitoring LOCATION East Hartford CT PROJECT NO. 88UT908 FAX #				<div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);"> VOC's PCB's CT ETPH Metals Asbestos + Contaminants </div> <div> DW - DRINKING WATER GW - GROUND WATER WW - WASTE WATER SO - SOIL SL - SLUDGE OI - OIL LIQ - OTHER LIQUID SOL - OTHER SOLID </div> </div>										LAB USE ONLY								
ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION			MATRIX	# OF BOTTLES	PRESERVATION																		
		DATE	TIME	SAMPLED BY:			HCl	NaOH	HNO3	H2SO4	NONE	OTHER													
	1122876	6/18/09	9:40	NE	GW	2	X							X	X										
	1122876 of		9:40			1			X					X											
	1122876		9:40			4								XX	XX										
	1122877		12:00			2	X							X	X										
	1122877 of		12:00			1			X					X											
	1122877		12:00			4								XX	XX										
	1122878		13:55			2	X							X	X										
	1122878 of		13:55			1			X					X											
	1122878	6/18/09	13:55	NE		4								XX	XX										
<div style="display: flex; justify-content: space-between;"> <div> DATA TURNAROUND INFORMATION <input checked="" type="checkbox"/> 14 DAYS STANDARD <input type="checkbox"/> 7 DAYS RUSH <input type="checkbox"/> 48 HOUR EMERGENCY <input type="checkbox"/> OTHER _____ 14 DAY TURNAROUND HARDCOPY. EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED </div> <div> APPROVED BY: _____ STANDARD <input type="checkbox"/> COMMERCIAL "B" <input type="checkbox"/> DISK DELIVERABLE <input type="checkbox"/> STATE FORMS <input type="checkbox"/> OTHER (SPECIFY) _____ </div> <div> COMMENTS/REMARKS _____ _____ _____ </div> </div>																									
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY																									
RELINQUISHED BY SAMPLER: 1. Nathan Funnors		DATE TIME: 6/18/09 1600		RECEIVED BY: 1. [Signature]		RELINQUISHED BY: 2.		DATE TIME:		RECEIVED BY: 2.															
RELINQUISHED BY: 3.		DATE TIME:		RECEIVED BY: 3.		RELINQUISHED BY: 4.		DATE TIME:		RECEIVED BY: 4.															
RELINQUISHED BY: 5.		DATE TIME:		RECEIVED BY: 5.		SEAL #		PRESERVE WHERE APPLICABLE <input type="checkbox"/>		ON ICE <input type="checkbox"/>		TEMPERATURE _____ C													



CHAIN OF CUSTODY

KBI-2009/435

[illegible]

ACJUTEST.

Laboratories

3/0f3

CHAIN OF CUSTODY

495 TECHNOLOGY CENTER WEST • BUILDING ONE

MARLBOROUGH, MA 01752

TEL: 508-481-6200 • FAX: 508-481-7753

ACCUTEST JOB #:

ACCUTEST QUOTE #:

KB1/2009-435

[illegible]



DAILY FIELD REPORT

Loureiro Engineering Associates, Inc.

LEA Comm. No. 88UT908.001
 Project UTC P&W F&H GW Monitoring 2009
 Location P&W East Hartford, East Hartford, CT
 Client Pratt & Whitney Division - JTot

Page 1 of 11
 Date 9/18/09

Arrived at Site 800 Departed from Site 1630

Vehicle ST-14

Site Activities

Odometer (Start) Re turn

☒ Soil Sampling
☐ Groundwater Sampling
☐ Surface Water Sampling
☐ Vapor/Air Sampling
☐ Concrete Sampling
☐ Other Sampling
☐ Other Sampling

☐ Geoprobe Work
☐ Concrete Coring
☐ Construction
☐ Waste Management
☐ Inspection
☐ Site Walk Over
☐ Surveying
☐ Other (Describe)

Current Project Information

Last Sample Number Used ~~SK~~
 Last Location ID Used
 Current Location (if not complete) on site
 Sampling for See chains
 Laboratories used Accutest
 Paperwork & Equipment left at/in office
 Site Contact John Fitzsimmons
 Contractors on Site LEA

Non-productive Time

☐ None
☐ Equipment Breakdown
☐ Late

☐ Weather
☐ Missing Equipment
☐ Other (Describe)

Time and place to meet contractors

Quality Assurance Checks

Yes	N/A	No	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sample labels complete
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sample/cooler seals OK
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	All samples obtained
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Chains of custody
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	All forms/logs complete
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Site condition OK
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Site H&S Plan on site
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Instruments calibrated

Residuals Disposition

Item	Approx. Amount	Container ID
Soil/Solid	SK	
Groundwater		728921-46
Decon Fluid		
PPE	SK	
Other		

Weather Conditions

Temperature 75 Precipitation Wind
 Comments

Checked By

Expendable Items Used

Qty	Item	LEA Number
	Bailer, Disposable (specify size)	090
	Drum, Closed Top 55 Gallon	086
	Filter, In Line	024
1	Miscellaneous Health & Safety Items	060
	Tubing, 1/2", NOS	007
	Tubing, 3/8", NOS	008
	Water, Distilled	025

Equipment Used

Qty	Item	LEA Number
	Generator 3500 Watt	153
	Meter, Conductivity	022
	Meter, pH/Temp	021
1	Miscellaneous Small Tools & Equipment	152
	Pump, Grundfos	073
2	Pump, Peristaltic (spec. Master or Isco)	040
	Pump, Submersible	201
	Pump, Watera	038
2	Turbidimeter	023
	VOC Analyzer, Photovac 2020 (PID)	012
2	Water Level Indicator	028
2	Water Quality Meter w/Flow Cell	070

75" Silica tubing

Field Personnel Heather Grimm R Zurkowski
 Sophia Kim

Signature
 [Signature]



Loureiro Engineering Associates, Inc.

DAILY FIELD REPORT

Supplemental Sheet

LEA Comm. No. 88UT908.001
Project UTC P&W F&H GW Monitoring 2009
Location P&W East Hartford, East Hartford, CT
Client Pratt & Whitney Division - JTot

Page 2 of 10
Date 9/18/09

Description of Site Activities

8 AM ON SITE

WAITING FOR TRC personnel to do the pre-job
MET JOHN FIRSIMMONS FOR PRE JOB
CALIBRATED EQUIPMENT

9:15 BEGAN GW SAMPLING

10:55

1545 COMPLETED GW SAMPLING

1555 MET BENNY ER ACCUTEST FOR SAMPLE DROP OFF

1600 WASTE DISPOSAL OF GW INTO WT AREA

1630 OFF SITE

(52)

Field Personnel

Heather Grimm
Sophia Kim

R Zurkowski

Signature



Loureiro Engineering Associates, Inc.

DAILY FIELD REPORT CALIBRATION RECORD

Page 3 of 11
Date 9/18/09

LEA Comm. No. 88UT908.001
Project UTC P&W F&H GW Monitoring 2009
Location P&W East Hartford, East Hartford, CT
Client Pratt & Whitney Division - JTot

pH Meter/Serial # 04C2284 AD
YSI 01J0899AE
Time pH 4.01 pH 7.00 pH 10.01 Spec. Cond. ORP DO
Initial Calibration 9:00 4.00 7.00 10.00 1000 101 100
Calibration Check _____
Calibration Check _____

Turbidity Meter/Serial # 2017
2014 Time 0 NTU 20 NTU 100 NTU 800 NTU
Initial Calibration 8:55 / / /
Calibration Check _____
Calibration Check _____

PID Meter/Serial # _____
Time Standard Meter Reading Zero with
Initial Calibration _____
Calibration Check Sr _____
Calibration Check _____

Balance/Serial # _____
Time Standard Balance
Initial Calibration _____
Calibration Check _____
Calibration Check _____

Comments

Field Personnel Heather Grimm R Zurkowski
Sophia Kim

Signature
[Signature]



LEA Comm. No.	88UT908.001
Project	UTC P&W F&H GW Monitoring 2009
Location	P&W East Hartford, East Hartford, CT
Client	Pratt & Whitney Division - JTot

Page 4 of 11
Date 9/18/09

Field Personnel	Heather Grimm Sophia Kim	Zurkowski
-----------------	--	-----------

Signature

Signature

Sample ID	Location ID	Time	Predicted Depth of Well to Water	Actual Depth of Well to Water	PID/FID	Reference Elevation	Comments
2233151	HB-MW-05	930	14.60	10.15	NM	T of C	
2233152	HB-MW-07	935		14.42			
2233153	HB-MW-06	945		13.60			
2233154	HB FB-MW-01	955		13.80			
2233155	FB-MW-02	1005		13.59			
2233156	HB-MW-04	1035		13.36			
2233157							
2233158							
2233159							
2233160					NM	T of C	
Field Personnel: Heather Grimm, Sophia Kim							
Signature							



Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD

LOW FLOW WELL SAMPLE

LEA Comm. No. 88UT908.001
Project UTC P&W F&H GW Monitoring 2009
Location P&W East Hartford, East Hartford, CT
Client Pratt & Whitney Division - JTot

Page 6 of 14
Date 9/18/09
Sample Time 10:50

Monitoring Well Number HB-MW-05 Sample Number(s) 1131966

1131966.4

Initial Field Data and Measurements

Depth of Well 14.60 Reference Used TOR
Depth to Water 10.15 PID/FID Reading -
Height of Column 4.45 Interface Yes ☒ No ☐ If yes, Depth Lighter / Heavier
Well Casing Diameter 1.5" Material PVC General Condition OK ☒ Bad ☐
Protector Road Box Stickup Casing Secure ☒
Ground to Reference Collar Intact ☒
Comments Cover Locked ☒
Other (describe)

Development Information

Parameter	Depth to Water	Pump Setting	Purge Rate (mL/min)	Cum. Liters Purged (L)	Temp (C)	Spec. Cond. (uS/cm)	pH (SU)	ORP (Eh)	DO (mg/L)	Turbidity (NTU)	Comment
Time											
9:40	10.15	300	120	START	PURGING						
9:50	10.18			1.2	22.72	15440	6.05	89.2	6.29	30.9	73.2
10:00	10.18			2.4	22.76	1528	5.97	93.2	6.25	15.4	72.9
10:10				3.6	23.20	1510	5.92	94.3	6.18	7.66	72.7
10:20				4.8	23.30	1505	5.91	97.6	6.14	4.78	72.3
10:30				6	22.85	1496	5.88	97.7	6.13	4.75	71.6
10:40				7.2	22.89	1500	5.88	100.4	6.17	4.68	72.0
10:45				7.8	22.90	1503	5.88	98.0	6.16	4.59	72.2
10:50				8.4	22.88	1502	5.88	96.9	6.19	4.21	72.1

Development Method Peristaltic Pump / Bailer / Inertial Pump / Other

Sample Field Treatment If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!

Field Decontamination? Yes ☒ No ☐ If Yes, with what?

Waste Container ID 728921

Additional Comments

Field Personnel Heather Grimm
Sophia Kim

Rob Zurkowski

Signature [Signature]



Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD

LOW FLOW WELL SAMPLE

LEA Comm. No. 88UT908.001
 Project UTC P&W F&H GW Monitoring 2009
 Location P&W East Hartford, East Hartford, CT
 Client Pratt & Whitney Division - JTot

Page 7 of 11
 Date 7/18/09
 Sample Time 11:00

Monitoring Well Number HB-MW-07 Sample Number(s) 1131962 11319620f

Initial Field Data and Measurements

Depth of Well 14.42 Reference Used T of C
 Depth to Water 9.76 PID/FID Reading NM
 Height of Column 4.66 Interface Yes / No If yes, Depth Lighter / Heavier
 Well Casing Diameter 1.5" Material PVC General Condition OK Bad
 Protector Road Box / Stickup Casing Secure 111
 Ground to Reference NM Collar Intact 111
 Comments Cover Locked 111
 Other (describe)

Development Information

Parameter	Depth to Water	Pump Setting	Purge Rate (mL/min)	Cum. Liters Purged (L)	Temp (C)	Spec. Cond. (uS/cm)	pH (SU)	ORP (Eh)	DO (mg/L)	Turbidity (NTU)	Comment
Time											
9:40	9.76	300	90	0							→ purging
10:00	*		90	1.8	20.22	482	6.45	167.8	0.77	2.88	
10:10			100	2.8	20.39	499	6.28	209.9	0.79	3.32	
10:20				3.8	20.47	523	6.11	278.8	0.63	1.89	
10:30				4.8	20.66	539	5.91	336.7	0.63	2.65	
10:40				5.8	20.64	558	5.75	385.6	0.63	2.40	
10:50				6.8	20.59	568	5.69	410.2	0.60	2.47	
10:55				7.3	20.72	571	5.70	409.8	0.62	2.07	
11:00				7.8	20.74	573	5.70	417.3	0.65	2.04	SAMPLE

Development Method Peristaltic Pump / Bailer / Inertial Pump / Other

Sample Field Treatment If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!

Field Decontamination? Yes ☒ No ☐ If Yes, with what?

Waste Container ID 728921 HB

Additional Comments *could not measure due to faulty WLI. USED ROB'S TO GET THE INITIAL MEASUREMENT

Field Personnel ~~Weather Grimm~~ ZURKOWSKI
 Sophia Kim

Signature



Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD

LOW FLOW WELL SAMPLE

LEA Comm. No. 88UT908.001 Page 8 of 11
 Project UTC P&W F&H GW Monitoring 2009 Date 9/18/09
 Location P&W East Hartford, East Hartford, CT Sample Time 12:50
 Client Pratt & Whitney Division - JTot

Monitoring Well Number HB-MW-06 Sample Number(s) 1131965 1131965d

Initial Field Data and Measurements

Depth of Well 13.60 Reference Used TOR
 Depth to Water 8.79 PID/FID Reading -
 Height of Column 4.81 Interface Yes / No If yes, Depth Lighter / Heavier
 Well Casing Diameter 1.5" Material PVC General Condition OK Bad
 Protector Road Box / Stickup Casing Secure X
 Ground to Reference Collar Intact X
 Comments Cover Locked X
 Other (describe)

Development Information

Parameter	Depth to Water	Pump Setting	Purge Rate (mL/min)	Cum. Liters Purged (L)	Temp (C)	Spec. Cond. (uS/cm)	pH (SU)	ORP (Eh)	DO (mg/L)	Turbidity (NTU)	% Comment
Time											
11:40	8.79	300	120	START	PURGE	NG					
11:50	8.80			1.2	21.45	422	6.11	108.4	0.43	3.59	4.9
12:00	8.80			2.4	21.48	421	6.08	111.6	0.46	3.46	5.2
12:10				3.6	21.42	421	6.07	116.4	0.45	3.40	5.1
12:20				4.8	21.34	421	6.06	112.0	0.44	3.38	5.0
12:30				6	21.52	427	6.05	120.5	0.47	2.85	5.3
12:40				7.2	21.41	426	6.03	126.2	0.43	2.46	4.9
12:45				7.8	21.45	428	6.03	125.8	0.45	2.15	5.0
12:50	↓	↓	↓	8.4	21.43	427	6.03	126.1	0.44	1.98	5.1

Development Method Peristaltic Pump / Bailer / Inertial Pump / Other

Sample Field Treatment If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!

Field Decontamination? Yes / No If Yes, with what?

Waste Container ID 728921 HB

Additional Comments

Field Personnel Heather Grimm
 Sophia Kim

Rob Zurkowski

Signature



Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD

LOW FLOW WELL SAMPLE

LEA Comm. No. 88UT908.001

Page 9 of 11

Project UTC P&W F&H GW Monitoring 2009

Date 9/18/09

Location P&W East Hartford, East Hartford, CT

Sample Time 12:56

Client Pratt & Whitney Division - JTot

Monitoring Well Number FB-MW-01

Sample Number(s) 1131963

11319630F

Initial Field Data and Measurements

Depth of Well 13.80'

Reference Used T of C

Depth to Water 9.48'

PID/FID Reading NM

Height of Column 3.32'

Interface Yes / No If yes, Depth Lighter / Heavier

Well Casing Diameter 1.5"

Material PVC

General Condition OK Bad

Protector Road Box / Stickup

Casing Secure

Ground to Reference

Collar Intact

Comments

Cover Locked

Other (describe)

Development Information

Parameter Time	Depth to Water	Pump Setting	Purge Rate (mL/min)	Cum. Liters Purged (L)	Temp (C)	Spec. Cond. (uS/cm)	pH (SU)	ORP (Eh)	DO (mg/L)	Turbidity (NTU)	Comment
11:55	9.48	300	100	0							PURGING
12:20	*			2.5	24.19	424	6.17	133.0	3.34	2.39	
12:30				3.5	22.06	422	5.73	249.6	0.85	2.51	
12:40				4.5	21.74	438	5.74	281.2	0.69	2.27	
12:50				5.5	22.07	451	5.77	291.2	0.69	2.87	
12:53				5.8	22.16	453	5.78	292.6	0.73	1.53	
12:56				6.1	22.26	454	5.78	294.3	0.73	2.19	SAMPLE

Development Method Peristaltic Pump / Bailer / Inertial Pump / Other

Sample Field Treatment If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!

Field Decontamination? Yes / No If Yes, with what?

Waste Container ID 728921 HD

Additional Comments * COULD NOT MONITOR DUE TO BROKEN WLT

Field Personnel

Heather Grimm
Sophia Kim

ZURKOWSKI

Signature



Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD LOW FLOW WELL SAMPLE

LEA Comm. No. 88UT908.001 Page 10 of 11
Project UTC P&W F&H GW Monitoring 2009 Date 9/18/09
Location P&W East Hartford, East Hartford, CT Sample Time 14:40
Client Pratt & Whitney Division - JTot

Monitoring Well Number FB-MW-02 Sample Number(s) 1131964 1131964uf

Initial Field Data and Measurements

Depth of Well 13.59' Reference Used TOFC
Depth to Water 8.81' PID/FID Reading NM
Height of Column 4.78' Interface Yes / No If yes, Depth Lighter / Heavier
Well Casing Diameter 1.51' Material PVC General Condition OK Bad
Protector Road Box / Stickup Casing Secure 1/1/1
Ground to Reference NM Collar Intact 1/1/1
Comments Cover Locked 1/1/1
Other (describe)

Development Information

Parameter Time	Depth to Water	Pump Setting	Purge Rate (mL/min)	Cum. Liters Purged (L)	Temp (C)	Spec. Cond. (uS/cm)	pH (SU)	ORP (Eh)	DO (mg/L)	Turbidity (NTU)	Comment
1345	8.81	300	100	0							Purging
1405	*			2	22.41	285	6.42	196.6	5.91	2.29	
1415				3	22.59	287	6.37	318.6	5.82	2.06	
1425				4	22.54	288	6.41	359.4	5.74	1.96	
1430				4.5	22.36	288	6.44	366.4	5.68	2.45	
1435				5	22.35	287	6.45	369.0	5.66	1.73	
1440				5.5	22.36	286	6.45	370.2	5.67	2.35	SAMPLE

Development Method Peristaltic Pump / Bailer / Inertial Pump / Other

Sample Field Treatment If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!

Field Decontamination? Yes (No) If Yes, with what?

Waste Container ID 728921 HG

Additional Comments * COULD NOT MONITOR DUE TO BROKEN WLI

Field Personnel Heather Grimm ZUKOWSKI
Sophia Kim

Signature



Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD

LOW FLOW WELL SAMPLE

LEA Comm. No. 88UT908.001
 Project UTC P&W F&H GW Monitoring 2009
 Location P&W East Hartford, East Hartford, CT
 Client Pratt & Whitney Division - JTot

Page 11 of 11
 Date 9/18/09
 Sample Time 14:45

Monitoring Well Number HB-MW-04 Sample Number(s) 1131967 1131967 of

Initial Field Data and Measurements

Depth of Well 13.36 Reference Used TOR
 Depth to Water 8.20 PID/FID Reading
 Height of Column 5.16 Interface Yes / NO If yes, Depth Lighter / Heavier
 Well Casing Diameter 1.5" Material PVC General Condition OK Bad
 Protector Road Box / Stickup Casing Secure X
 Ground to Reference Collar Intact X
 Comments Cover Locked X
 Other (describe)

Development Information

Parameter	Depth to Water	Pump Setting	Purge Rate (mL/min)	Cum. Liters Purged (L)	Temp (C)	Spec. Cond. (uS/cm)	pH (SU)	ORP (Eh)	DO (mg/L)	Turbidity (NTU)	1090 Comment
Time											
13:40	8.25	300	120	START	PURGING						
13:50	8.30			1.2	21.70	545	7.14	100.7	0.05	5.83	0.6
14:00	8.30			2.4	21.76	596	7.07	106.4	0.06	4.64	0.6
14:10				3.6	21.84	594	6.92	130.6	0.04	4.32	0.4
14:20				4.8	21.79	597	6.92	141.8	0.05	4.42	0.5
14:30				6	21.80	597	6.92	141.7	0.04	4.38	0.5
14:40				7.2	21.85	597	6.92	142.0	0.05	4.35	0.5
14:45				7.8	21.82	597	6.92	141.8	0.04	4.39	0.4

Development Method Peristaltic Pump / Bailer / Inertial Pump / Other

Sample Field Treatment If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!

Field Decontamination? Yes / NO If Yes, with what?

Waste Container ID 728921 HB

Additional Comments

Field Personnel Heather Grimm
 Sophia Kim

Rob Zurkowski

Signature

CLIENT INFORMATION			FACILITY INFORMATION			ANALYTICAL INFORMATION										MATRIX CODES				
NAME LOUREIRO ENGINEERING ADDRESS 100 Northwood Dr CITY Plainville STATE CT ZIP SEND REPORT TO: PHONE #			PROJECT NAME UTC PTH F&H GW Monitoring 2009 LOCATION PTH East Hartford PROJECT NO. 88UT908.001 FAX #			<div style="display: flex; justify-content: space-between;"> <div> RCP VOCs RCP PCBs CT EPTH PCRB METALS TOXIC </div> <div> DW - DRINKING WATER GW - GROUND WATER WW - WASTE WATER SO - SOIL SL - SLUDGE OI - OIL LIQ - OTHER LIQUID SOL - OTHER SOLID </div> </div>														
ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION			MATRIX	# OF BOTTLES	PRESERVATION							LAB USE ONLY						
		DATE	TIME	SAMPLED BY:			HCl	NaOH	HNO3	H2SO4	NONE	ICE								
1131965		9/18/09	12:50	RJZ	GW	2	X						X	X						
1131965		9/18/09	12:50	RJZ	GW	2							X	X						
1131965		9/18/09	12:50	RJZ	GW	2							X		X					
1131965 w/		9/18/09	12:50	RJZ	GW	1			X				X			X				
1131966		9/18/09	10:50	RJZ	GW	2	X						X	X						
1131966		9/18/09	10:50	RJZ	GW	2							X	X						
1131966		9/18/09	10:50	RJZ	GW	2							X		X					
1131966 w/		9/18/09	10:50	RJZ	GW	1			X				X			X				
1131967		9/18/09	14:45	RJZ	GW	2	X						X	X						
1131967		9/18/09	14:45	RJZ	GW	2							X	X						
1131967		9/18/09	14:45	RJZ	GW	2							X		X					
DATA TURNAROUND INFORMATION			DATA DELIVERABLE INFORMATION			COMMENTS/REMARKS														
<input checked="" type="checkbox"/> 14 DAYS STANDARD <input type="checkbox"/> 7 DAYS RUSH <input type="checkbox"/> 48 HOUR EMERGENCY <input type="checkbox"/> OTHER _____ 14 DAY TURNAROUND HARDCOPY. EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED			APPROVED BY: _____ <input type="checkbox"/> STANDARD <input type="checkbox"/> COMMERCIAL "B" <input type="checkbox"/> DISK DELIVERABLE <input type="checkbox"/> STATE FORMS <input type="checkbox"/> OTHER (SPECIFY) _____			_____ _____ _____ _____														
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY																				
RELINQUISHED BY: 1. [Signature]		DATE TIME: 9/18/09		RECEIVED BY: 1. [Signature]		RELINQUISHED BY: 2.		DATE TIME:		RECEIVED BY: 2.										
RELINQUISHED BY: 3.		DATE TIME:		RECEIVED BY: 3.		RELINQUISHED BY: 4.		DATE TIME:		RECEIVED BY: 4.										
RELINQUISHED BY: 5.		DATE TIME:		RECEIVED BY: 5.		SEAL #		PRESERVE WHERE APPLICABLE <input type="checkbox"/>		ON ICE <input type="checkbox"/>		TEMPERATURE _____ C								



DAILY FIELD REPORT

Loureiro Engineering Associates, Inc.

LEA Comm. No. 88UT908.001 Page 1 of 11
 Project UTC P&W F&H GW Monitoring 2009 Date 12/7/09
 Location P&W East Hartford, East Hartford, CT
 Client Pratt & Whitney Division - JTot

Arrived at Site 9:00 Departed from Site 15:15 Vehicle GW - Van
 Odometer (Start)Re turn

Site Activities
☒ Soil Sampling
☒ Groundwater Sampling
☐ Surface Water Sampling
☐ Vapor/Air Sampling
☐ Concrete Sampling
☐ Other Sampling
☐ Other Sampling
☐ Well Development
☐ Geoprobe Work
☐ Concrete Coring
☐ Construction
☐ Waste Management
☐ Inspection
☐ Site Walk Over
☐ Surveying
☐ Other (Describe)
 Current Project Information
 Last Sample Number Used 1136038
 Last Location ID Used
 Current Location (if not complete)
 Sampling for See chain
 Laboratories used Accutest
 Paperwork & Equipment left at/in office
 Site Contact Jeff Thompson
 Contractors on Site

Non-productive Time
☒ None
☐ Equipment Breakdown
☐ Late
☐ Weather
☐ Missing Equipment
☐ Other (Describe)
 Time and place to meet contractors

Quality Assurance Checks
 Yes N/A No
☒ Sample labels complete
☒ Sample/cooler seals OK
☒ All samples obtained
☒ Chains of custody
☒ All forms/logs complete
☒ Site condition OK
☒ Site H&S Plan on site
☒ Instruments calibrated
 Residuals Disposition
 Item Approx. Amount Container ID
 Soil/Solid
 Groundwater 15gal 735186
 Decon Fluid
 PPE
 Other

Weather Conditions
 Temperature 30-40s Precipitation Wind Light
 Comments

Expendable Items Used			Equipment Used		
Qty	Item	LEA Number	Qty	Item	LEA Number
	Bailer, Disposable (specify size)	090		Generator 3500 Watt	153
	Drum, Closed Top 55 Gallon	086		Meter, Conductivity	022
	Filter, In Line	024		Meter, pH/Temp	021
X	Miscellaneous Health & Safety Items	060	1	Miscellaneous Small Tools & Equipment	152
	Tubing, 1/2", NOS	007		Pump, Grundfos	073
X	Tubing, 3/8", NOS 150'	008	2	Pump, Peristaltic (spec. Master or Isco)	040
	Water, Distilled	025		Pump, Submersible	201
				Pump, Watera	038
			2	Turbidimeter	023
			1	VOC Analyzer, Photovac 2020 (PID)	012
			2	Water Level Indicator	028
			2	Water Quality Meter w/Flow Cell	070

Field Personnel Nate Emmons Signature Nate Emmons



Loureiro Engineering Associates, Inc.

DAILY FIELD REPORT

Supplemental Sheet

LEA Comm. No. 88UT908.001
Project UTC P&W F&H GW Monitoring 2009
Location P&W East Hartford, East Hartford, CT
Client Pratt & Whitney Division - JTot

Page 2 of 4
Date 12/7/09

Description of Site Activities

9:00 Onsite
R. Zurkowski on site purging HB-mw-06
Collected equipment calibrated and set up on well
9:30 Began purging + sampling
12:30 R. Zurkowski off site for lunch
12:50 R. Zurkowski on site
14:50 R. Zurkowski finished sampling and taking wastewater
to waste treat.
15:00 Called Benny from Agutest for sample pickup
15:15 N. Emmons Completed Sampling
and off site

16

Field Personnel Nate Emmons

Signature
Nate Emmons



Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD

MISCELLANEOUS SAMPLES

LEA Comm. No. 88UT908.001
Project UTC P&W F&H GW Monitoring 2009
Location P&W East Hartford, East Hartford, CT
Client Pratt & Whitney Division - JTot

Page 4 of 11
Date 12/7/09

Sample ID	Location ID	Time	Sample Type	Depth (ft)	PID/FID Reading	Comments	Waste Cont. ID
1136038	Trip Blank	9:45	BKT			Trip Blank	735186
1136037	Equipment Blank	14:30	BKE			Equipment Blank	735186
1136033	Duplicate					Duplicate of 1136030	735186
<div>16</div>							

Field Personnel Nate Emmons

Signature
Nate Emmons



Loureiro Engineering Associates, Inc.

DAILY FIELD REPORT CALIBRATION RECORD

LEA Comm. No. 88UT908.001 Page 5 of 11
Project UTC P&W F&H GW Monitoring 2009 Date 12/7/09
Location P&W East Hartford, East Hartford, CT
Client Pratt & Whitney Division - JTot

pH Meter/Serial # 09J100084

	Time	pH 4.01	pH 7.00	pH 10.01	Spec. Cond.	ORP	DO
Initial Calibration	9:00	4.0	7.0	10.0	1000	109	
Calibration Check							
Calibration Check							

Turbidity Meter/Serial # LEA # 3522

	Time	0 NTU	20 NTU	100 NTU	800 NTU
Initial Calibration	9:35	✓	✓	✓	
Calibration Check					
Calibration Check					

PID Meter/Serial #

	Time	Standard	Meter Reading	Zero with
Initial Calibration				
Calibration Check				
Calibration Check				

Balance/Serial #

	Time	Standard	Balance
Initial Calibration			
Calibration Check			
Calibration Check			

Comments

Field Personnel Nate Emmons

Signature
Nate Emmons



Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD

LOW FLOW WELL SAMPLE

LEA Comm. No. 88UT908.001

Page 6 of 11

Project UTC P&W F&H GW Monitoring 2009

Date 12/7/09

Location P&W East Hartford, East Hartford, CT

Sample Time 13:05

Client Pratt & Whitney Division - JTot

Monitoring Well Number HB-MW-05

Sample Number(s) 1136035

1136035 JF

Initial Field Data and Measurements

Depth of Well 14.59

Reference Used T & R

Depth to Water 10.34

PID/FID Reading

Height of Column 4.25

Interface

Yes (No)

If yes, Depth

Lighter / Heavier

Well Casing Diameter 1 1/2"

Material

PVC

General Condition

OK

Bad

Protector Road Box / Stickup

Casing Secure

Ground to Reference

Collar Intact

Comments

Cover Locked

Other (describe)

Development Information

Parameter Time	Depth to Water	Pump Setting	Purge Rate (mL/min)	Cum. Liters Purged (L)	Temp (C)	Spec. Cond. (uS/cm)	pH (SU)	ORP (Eh)	DO (mg/L)	Turbidity (NTU)	Comment
11:20	10.34	300	100								Purging
11:40	10.34		100	2	16.10	1148	5.41	43.4	6.94	35.1	
12:00	10.34		100	4	16.61	1109	5.30	77.4	5.41	12.8	
12:10	10.34		100	5	16.90	1095	5.20	80.3	3.82	9.77	
12:20	10.34		100	6	16.55	1090	5.19	80.7	3.84	8.22	
12:30	10.34		100	7	16.40	1087	5.19	80.6	3.70	7.53	
12:40	10.34		100	8	16.30	1084	5.19	81.3	3.83	7.02	
12:50	10.34		100	9	16.25	1083	5.20	80.4	3.87	4.89	
12:55	10.34		100	9.5	16.27	1083	5.19	80.1	3.88	4.21	
13:00	10.34		100	10	16.24	1082	5.19	80.2	3.86	3.88	
13:05	10.34	300	100	10.5	16.24	1083	5.19	80.1	3.87	3.79	
Sample											

Development Method Peristaltic Pump / Bailer / Inertial Pump / Other

Sample Field Treatment If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!

Field Decontamination? Yes / No

If Yes, with what?

Meth on WLI

Waste Container ID 735186

Additional Comments

Field Personnel

Nate Emmons

Signature

Nate Emmons



Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD

LOW FLOW WELL SAMPLE

LEA Comm. No. 88UT908.001 Page 7 of 11
 Project UTC P&W F&H GW Monitoring 2009 Date 12/7/09
 Location P&W East Hartford, East Hartford, CT Sample Time 10:35
 Client Pratt & Whitney Division - JTot

Monitoring Well Number FB-MW-02 Sample Number(s) 1136034 1136034 JP

Initial Field Data and Measurements

Depth of Well 13.61 Reference Used TWR
 Depth to Water 8.87 PID/FID Reading
 Height of Column Interface Yes / No If yes, Depth Lighter / Heavier
 Well Casing Diameter 1 1/2" Material PVC General Condition OK Bad
 Protector Road Box / Stickup Casing Secure
 Ground to Reference Collar Intact
 Comments Cover Locked
 Other (describe)

Development Information

Parameter	Depth to Water	Pump Setting	Purge Rate (mL/min)	Cum. Liters Purged (L)	Temp (C)	Spec. Cond. (uS/cm)	pH (SU)	ORP (Eh)	DO (mg/L)	Turbidity (NTU)	Comment
Time											
9:30	8.87	300	150								Purging
9:50	8.87		100	3	14.03	189	5.98	19.4	4.17	13.5	
10:00	8.87		100	4	13.97	187	5.96	23.1	3.51	10.2	
10:10	8.87		100	5	14.11	183	5.98	24.8	3.47	7.29	
10:20	8.87		100	6	14.14	179	5.95	24.5	3.67	3.50	
10:25	8.87		100	6.5	14.03	178	5.94	25.5	3.18	3.11	
10:30	8.87		100	7	14.05	177	5.94	25.6	3.26	2.67	
10:35	8.87	300	100	7.5	14.05	178	5.94	25.5	3.23	2.48	
Sample											

Development Method Peristaltic Pump / Bailer / Inertial Pump / Other

Sample Field Treatment If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!

Field Decontamination? Yes / No If Yes, with what?

Waste Container ID 735186

Additional Comments

Field Personnel Nate Emmons

Signature
Nathan Emmons

Loureiro Engineering Associates, Inc.



Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD

LOW FLOW WELL SAMPLE

LEA Comm. No. 88UT908.001 Page 9 of 11
 Project UTC P&W F&H GW Monitoring 2009 Date 12/17/09
 Location P&W East Hartford, East Hartford, CT Sample Time 9:50
 Client Pratt & Whitney Division - JTot

Monitoring Well Number HD-MW-06 Sample Number(s) 1136030 1136033 1136033

Initial Field Data and Measurements

Depth of Well 13.38 Reference Used TOR
 Depth to Water 8.88 PID/FID Reading
 Height of Column 4.50 Interface Yes / No If yes, Depth Lighter / Heavier
 Well Casing Diameter 1.5" Material PVC General Condition OK Bad
 Protector Road Box / Stickup Casing Secure X
 Ground to Reference Collar Intact X
 Comments Cover Locked X
 Other (describe)

Development Information

Parameter	Depth to Water	Pump Setting	Purge Rate (mL/min)	Cum. Liters Purged (L)	Temp (C)	Spec. Cond. (uS/cm)	pH (SU)	ORP (Eh)	DO (mg/L)	Turbidity (NTU)	DO% Comment
Time											
8:50	8.88	300	120	START	PURGING						
9:00	8.94			1.2	14.20	399	5.55	113.1	0.60	5.21	5.9
9:10	8.94			2.4	14.32	400	5.56	112.3	0.58	4.62	5.5
9:20				3.6	14.68	404	5.57	109.6	0.55	4.34	5.4
9:30				4.8	14.67	403	5.57	110.7	0.54	3.86	5.2
9:40				6	14.69	401	5.57	110.4	0.55	3.42	5.4
9:50				7.2	14.68	403	5.57	110.6	0.54	3.48	5.3

Development Method Peristaltic Pump / Bailer / Inertial Pump / Other

Sample Field Treatment If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!

Field Decontamination? Yes / No If Yes, with what?

Waste Container ID

Additional Comments Took Duplicate Sample

Field Personnel Nate Emmons
 Rob Zurkowski

Signature
 [Signature]



Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD

LOW FLOW WELL SAMPLE

LEA Comm. No. 88UT908.001
 Project UTC P&W F&H GW Monitoring 2009
 Location P&W East Hartford, East Hartford, CT
 Client Pratt & Whitney Division - JTot

Page 10 of 11
 Date 12/7/09
 Sample Time 12:10

Monitoring Well Number HB-MW-04 Sample Number(s) 1136031

1136031cf

Initial Field Data and Measurements

Depth of Well 13.16 Reference Used TOR
 Depth to Water 8.30 PID/FID Reading -
 Height of Column 4.86 Interface Yes / ☒ No If yes, Depth Lighter / Heavier
 Well Casing Diameter 1.5" Material PVC General Condition OK Bad
 Protector Road Box / Stickup Casing Secure ☒
 Ground to Reference Collar Intact ☒
 Comments Cover Locked ☒
 Other (describe)

Development Information

Parameter	Depth to Water	Pump Setting	Purge Rate (mL/min)	Cum. Liters Purged (L)	Temp (C)	Spec. Cond. (uS/cm)	pH (SU)	ORP (Eh)	DO (mg/L)	Turbidity (NTU)	100% Comment
Time											
11:00	8.30	300	120	START	PURGING						
11:10	8.38			1.2	14.69	433	6.78	12.2	0.85	21.4	8.4
11:20	8.38			2.4	14.76	431	6.78	26.1	0.78	11.2	7.5
11:30				3.6	14.66	428	6.78	33.3	0.72	8.41	7.2
11:40				4.8	14.49	427	6.77	39.6	0.71	4.82	7.0
11:50				6	14.46	426	6.77	31.4	0.70	4.05	6.8
12:00				7.2	14.47	426	6.78	33.6	0.72	3.51	6.9
12:10				8.4	14.48	427	6.78	32.4	0.71	3.40	7.0

Development Method Peristaltic Pump / Bailer / Inertial Pump / Other

Sample Field Treatment If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!

Field Decontamination? Yes / ☒ No If Yes, with what?

Waste Container ID

Additional Comments

Field Personnel Nate Emmons

Rob Zurkowski

Signature

[Signature]



Loureiro Engineering Associates, Inc.

FIELD SAMPLING RECORD

LOW FLOW WELL SAMPLE

LEA Comm. No. 88UT908.001 Page 11 of 11
 Project UTC P&W F&H GW Monitoring 2009 Date 12/7/09
 Location P&W East Hartford, East Hartford, CT Sample Time 13:50
 Client Pratt & Whitney Division - JTot

Monitoring Well Number FB-MW-01 Sample Number(s) 1136032 1136032 of

Initial Field Data and Measurements

Depth of Well 13.58 Reference Used JOR
 Depth to Water 9.65 PID/FID Reading -
 Height of Column 3.93 Interface Yes / ☒ No If yes, Depth - Lighter / Heavier
 Well Casing Diameter 1.5" Material PVC General Condition OK ☒ Bad ☐
 Protector Road Box / Stickup Casing Secure ☒
 Ground to Reference - Collar Intact ☒
 Comments - Cover Locked ☒
 Other (describe) -

Development Information

Parameter	Depth to Water	Pump Setting	Purge Rate (mL/min)	Cum. Liters Purged (L)	Temp (C)	Spec. Cond. (uS/cm)	pH (SU)	ORP (Eh)	DO (mg/L)	Turbidity (NTU)	% Comment
Time											
12:40	9.65	300	120	START							
12:50	9.72			1.2	15.83	359	5.52	103.4	1.33	6.21	13.6
13:00	9.72			2.4	15.80	360	5.53	105.2	1.32	4.72	13.4
13:10				3.6	15.81	361	5.54	104.3	1.32	3.65	13.1
13:20				4.8	15.91	365	5.56	97.2	1.31	3.26	13.2
13:30				6	15.86	365	5.56	98.0	1.31	2.81	13.1
13:40				7.2	15.87	364	5.56	97.8	1.32	2.52	13.2
13:50				8.4	15.86	365	5.56	98.1	1.31	2.48	13.2

Development Method Peristaltic Pump / Bailer / Inertial Pump / Other

Sample Field Treatment *If any ambiguity could exist, be sure to indicate the field treatment applied to each sample aliquot with the appropriate suffix in the sample ID on both the sample bottle label and on the Chain of Custody!*

Field Decontamination? Yes / ☒ No If Yes, with what? -Waste Container ID -

Additional Comments

Field Personnel

Nate Emmons

Rob Zurkowski

Signature

Rob Zurkowski



Laboratories

CHAIN OF CUSTODY

495 TECHNOLOGY CENTER WEST • BUILDING ONE

MARLBOROUGH, MA 01752

TEL: 508-481-6200 • FAX: 508-481-7753

ACCUTEST JOB #:

ACCUTEST QUOTE #:

CLIENT INFORMATION

NAME

LEA

ADDRESS

100 Northwest Dr

CITY

Plainville CT 06062

STATE

ZIP

Kevin Bitzeman

SEND REPORT TO:

PHONE # (860) 747-6181

FACILITY INFORMATION

PROJECT NAME

F+H Post Remediation GW monitoring

East Hartford

LOCATION

88UT908

PROJECT NO.

FAX #

ANALYTICAL INFORMATION

MATRIX CODES

DW - DRINKING
WATER
GW - GROUND
WATER
WW - WASTE
WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER
LIQUID
SOL - OTHER
SOLIDACCUTEST
SAMPLE #

FIELD ID / POINT OF COLLECTION

COLLECTION

DATE

TIME

SAMPLED
BY:

MATRIX

OF
BOTTLES

PRESERVATION

HCl

NaOH

HNO3

H2SO4

NONE

ICE

VOCs

CT/ETPH

PCBs

Metals PCRA 8 + Cu, Ni, Zn

LAB USE ONLY

DATA TURNAROUND INFORMATION

☒ 14 DAYS STANDARD

APPROVED BY:

☐ 7 DAYS RUSH☐ 48 HOUR EMERGENCY☐ OTHER14 DAY TURNAROUND HARDCOPY, EMERGENCY OR RUSH IS FAX
DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

☒ STANDARD☐ COMMERCIAL "B"☐ DISK DELIVERABLE☐ STATE FORMS☐ OTHER (SPECIFY)

COMMENTS/REMARKS

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:

1. *William F. ...*

DATE TIME:

12/7/09 1515

RECEIVED BY:

1. *B. ...*

RELINQUISHED BY:

3.

DATE TIME:

RECEIVED BY:

3.

RELINQUISHED BY:

5.

DATE TIME:

RECEIVED BY:

5.

RELINQUISHED BY:

2.

RELINQUISHED BY:

4.

DATE TIME:

DATE TIME:

RECEIVED BY:

2.

RECEIVED BY:

4.

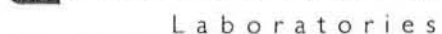
SEAL #

PRESERVE WHERE APPLICABLE

ON ICE

TEMPERATURE

C



ACCUTEST QUOTE #:

[illegible]

Appendix B

Copies of Laboratory Reports



01/19/10

IT'S ALL IN THE CHEMISTRY

01/19/10

Technical Report for

Loureiro Eng. Associates

UTC:2009 Quarterly GW-F&H Buildings

88UT908

Accutest Job Number: M81231

Sampling Date: 03/12/09

Report to:

Loureiro Eng. Associates

hmgrimm@loureiro.com

ATTN: Heather Grimm

Total number of pages in report: **72**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Reza Fand
Lab Director

Client Service contact: Kristen Blanchard 508-481-6200

Certifications: MA (M-MA136) CT (PH-0109) NH (2502) RI (00071) ME (MA0136) FL (E87579)
NY (11791) NJ (MA926) NC (653) IL (200018) NAVY USACE

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Test results relate only to samples analyzed.

Table of Contents

-1-

Section 1: Sample Summary	3
Section 2: Case Narrative/Conformance Summary	4
Section 3: Sample Results	6
3.1: M81231-1: 1117577	7
3.2: M81231-2: 1117577UF	12
3.3: M81231-3: 1117578	13
3.4: M81231-4: 1117578UF	18
3.5: M81231-5: 1117579UF	19
3.6: M81231-6: 1117579	20
3.7: M81231-7: 1117583	25
3.8: M81231-8: 1117582	28
3.9: M81231-9: 1117582UF	33
Section 4: Misc. Forms	34
4.1: Certification Exceptions	35
4.2: Chain of Custody	36
4.3: RCP Form	37
4.4: Sample Tracking Chronicle	38
Section 5: GC/MS Volatiles - QC Data Summaries	40
5.1: Method Blank Summary	41
5.2: Blank Spike/Blank Spike Duplicate Summary	47
5.3: Matrix Spike/Matrix Spike Duplicate Summary	50
5.4: Internal Standard Area Summaries	53
5.5: Surrogate Recovery Summaries	55
Section 6: GC Semi-volatiles - QC Data Summaries	56
6.1: Method Blank Summary	57
6.2: Blank Spike Summary	59
6.3: Matrix Spike/Matrix Spike Duplicate Summary	61
6.4: Surrogate Recovery Summaries	63
Section 7: Metals Analysis - QC Data Summaries	65
7.1: Prep QC MP13206: As,Ba,Cd,Cr,Cu,Pb,Ni,Se,Ag,Zn	66
7.2: Prep QC MP13208: Hg	70



Sample Summary

Loureiro Eng. Associates

Job No: M81231

UTC:2009 Quarterly GW-F&H Buildings
Project No: 88UT908

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
M81231-1	03/12/09	10:40	NE	03/12/09	AQ	Ground Water	1117577
M81231-2	03/12/09	10:40	NE	03/12/09	AQ	Ground Water	1117577UF
M81231-3	03/12/09	13:00	NE	03/12/09	AQ	Ground Water	1117578
M81231-4	03/12/09	13:00	NE	03/12/09	AQ	Ground Water	1117578UF
M81231-5	03/12/09	14:40	NE	03/12/09	AQ	Ground Water	1117579UF
M81231-6	03/12/09	14:40	NE	03/12/09	AQ	Ground Water	1117579
M81231-7	03/12/09	09:00	NE	03/12/09	AQ	Ground Water	1117583
M81231-8	03/12/09	14:30	NE	03/12/09	AQ	Ground Water	1117582
M81231-9	03/12/09	14:30	NE	03/12/09	AQ	Ground Water	1117582UF

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Loureiro Eng. Associates

Job No M81231

Site: UTC:2009 Quarterly GW-F&H Buildings

Report Date 3/26/2009 10:07:42 AM

9 Sample(s) were collected on 03/12/2009 and were received at Accutest on 03/12/2009 properly preserved, at 1.9 Deg. C and intact. These Samples received an Accutest job number of M81231. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix AQ	Batch ID: MSG3594
------------------	--------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M81256-6MS, M81256-6MSD were used as the QC samples indicated.
- MS/MSD has compounds exceed RCP control limits (70-130%), but within in-house control limits. Refer to MS/MSD spike summary pages for detail.
- Continuing calibration check standard for naphthalene, 1,2,3-trichlorobenzene exceed 30% Difference. This check standard met RCP criteria.
- Initial calibration standard (batch MSG3531) for chloromethane, bromomethane, 1,1-dichloroethene, acetone, trans-1,2-dichloroethene, cis-1,2-dichloroethene, trans-1,4-dichloro-2-butene, naphthalene is employed quadratic regression.

Extractables by GC By Method CT-ETPH

Matrix AQ	Batch ID: OP18064
------------------	--------------------------

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) M81179-16MS, M81179-16MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Extractables by GC By Method SW846 8082

Matrix AQ	Batch ID: OP18075
------------------	--------------------------

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) OP18075-MS/MSD were used as the QC samples indicated.

Metals By Method SW846 6010B

Matrix AQ

Batch ID: MP13206

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M81231-4DUP, M81231-4MS, M81231-4SDL were used as the QC samples for metals.
- RPD(s) for Duplicate for Selenium are outside control limits for sample MP13206-D1. RPD acceptable due to low duplicate and sample concentrations.
- RPD(s) for Serial Dilution for Chromium, Copper, Nickel, Zinc are outside control limits for sample MP13206-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- Only selected metals requested.

Metals By Method SW846 7470A

Matrix AQ

Batch ID: MP13208

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M81231-4DUP, M81231-4MS were used as the QC samples for metals.

Note: Compounds whose reported QC limits are outside the CT Recommended Reasonable Confidence Protocol QC criteria are designated by the lab as "Problem Compounds". QC criteria for a "Problem Compound" may meet Accutest in-house generated QC criteria but exceed the RCP criteria (compounds exceeding Accutest QC criteria are flagged on the QC summary). Refer to the QC summary pages.

Unless otherwise noted, sample dilutions are performed in order to report the result within the calibration range.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety. The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report (M81231).



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	1117577	Date Sampled:	03/12/09
Lab Sample ID:	M81231-1	Date Received:	03/12/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G88970.D	1	03/23/09	EL	n/a	n/a	MSG3594
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1117577	Date Sampled:	03/12/09
Lab Sample ID:	M81231-1	Date Received:	03/12/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		78-129%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1117577		
Lab Sample ID:	M81231-1	Date Sampled:	03/12/09
Matrix:	AQ - Ground Water	Date Received:	03/12/09
Method:	SW846 8260B	Percent Solids:	n/a
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	114%		80-120%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1117577**Lab Sample ID:** M81231-1**Date Sampled:** 03/12/09**Matrix:** AQ - Ground Water**Date Received:** 03/12/09**Method:** CT-ETPH SW846 3510C**Percent Solids:** n/a**Project:** UTC:2009 Quarterly GW-F&H Buildings

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BC25813.D	1	03/17/09	DG	03/13/09	OP18064	GBC1421
Run #2							

	Initial Volume	Final Volume
Run #1	910 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	0.115	0.088	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	84%		50-149%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1117577
Lab Sample ID: M81231-1
Matrix: AQ - Ground Water
Method: SW846 8082 SW846 3510C
Project: UTC:2009 Quarterly GW-F&H Buildings

Date Sampled: 03/12/09
Date Received: 03/12/09
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB24432.D	1	03/18/09	SL	03/16/09	OP18075	GBB1008
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.28	ug/l	
11104-28-2	Aroclor 1221	ND	0.28	ug/l	
11141-16-5	Aroclor 1232	ND	0.28	ug/l	
53469-21-9	Aroclor 1242	ND	0.28	ug/l	
12672-29-6	Aroclor 1248	ND	0.28	ug/l	
11097-69-1	Aroclor 1254	ND	0.28	ug/l	
11096-82-5	Aroclor 1260	ND	0.28	ug/l	
37324-23-5	Aroclor 1262	ND	0.28	ug/l	
11100-14-4	Aroclor 1268	ND	0.28	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	127%		32-149%
877-09-8	Tetrachloro-m-xylene	112%		32-149%
2051-24-3	Decachlorobiphenyl	104%		30-150%
2051-24-3	Decachlorobiphenyl	143%		30-150%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1117577UF

Lab Sample ID: M81231-2

Date Sampled: 03/12/09

Matrix: AQ - Ground Water

Date Received: 03/12/09

Percent Solids: n/a

Project: UTC:2009 Quarterly GW-F&H Buildings

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Barium	< 200	200	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Cadmium	< 4.0	4.0	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Chromium	< 10	10	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Copper	< 25	25	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Lead	< 5.0	5.0	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	03/16/09	03/17/09 CF	SW846 7470A ²	SW846 7470A ⁴
Nickel	< 40	40	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Selenium	< 10	10	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Silver	< 5.0	5.0	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Zinc	< 20	20	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³

(1) Instrument QC Batch: MA10253

(2) Instrument QC Batch: MA10256

(3) Prep QC Batch: MP13206

(4) Prep QC Batch: MP13208

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1117578		
Lab Sample ID:	M81231-3	Date Sampled:	03/12/09
Matrix:	AQ - Ground Water	Date Received:	03/12/09
Method:	SW846 8260B	Percent Solids:	n/a
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G88971.D	1	03/23/09	EL	n/a	n/a	MSG3594
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1117578	Date Sampled:	03/12/09
Lab Sample ID:	M81231-3	Date Received:	03/12/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		78-129%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1117578	Date Sampled:	03/12/09
Lab Sample ID:	M81231-3	Date Received:	03/12/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	116%		80-120%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1117578
Lab Sample ID: M81231-3
Matrix: AQ - Ground Water
Method: CT-ETPH SW846 3510C
Project: UTC:2009 Quarterly GW-F&H Buildings

Date Sampled: 03/12/09
Date Received: 03/12/09
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BC25814.D	1	03/17/09	DG	03/13/09	OP18064	GBC1421
Run #2							

	Initial Volume	Final Volume
Run #1	860 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	ND	0.093	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
3386-33-2	1-Chlorooctadecane	85%		50-149%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1117578	
Lab Sample ID:	M81231-3	Date Sampled: 03/12/09
Matrix:	AQ - Ground Water	Date Received: 03/12/09
Method:	SW846 8082 SW846 3510C	Percent Solids: n/a
Project:	UTC:2009 Quarterly GW-F&H Buildings	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB24438A.D	1	03/18/09	SL	03/16/09	OP18075	GBB1008
Run #2							

	Initial Volume	Final Volume
Run #1	800 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.31	ug/l	
11104-28-2	Aroclor 1221	ND	0.31	ug/l	
11141-16-5	Aroclor 1232	ND	0.31	ug/l	
53469-21-9	Aroclor 1242	ND	0.31	ug/l	
12672-29-6	Aroclor 1248	ND	0.31	ug/l	
11097-69-1	Aroclor 1254	ND	0.31	ug/l	
11096-82-5	Aroclor 1260	ND	0.31	ug/l	
37324-23-5	Aroclor 1262	ND	0.31	ug/l	
11100-14-4	Aroclor 1268	ND	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	108%		32-149%
877-09-8	Tetrachloro-m-xylene	95%		32-149%
2051-24-3	Decachlorobiphenyl	102%		30-150%
2051-24-3	Decachlorobiphenyl	134%		30-150%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1117578UF**Lab Sample ID:** M81231-4**Matrix:** AQ - Ground Water**Date Sampled:** 03/12/09**Date Received:** 03/12/09**Percent Solids:** n/a**Project:** UTC:2009 Quarterly GW-F&H Buildings**Total Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Barium	< 200	200	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Cadmium	< 4.0	4.0	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Chromium	13.7	10	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Copper	< 25	25	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Lead	< 5.0	5.0	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	03/16/09	03/17/09 CF	SW846 7470A ²	SW846 7470A ⁴
Nickel	< 40	40	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Selenium	< 10	10	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Silver	< 5.0	5.0	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Zinc	< 20	20	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³

(1) Instrument QC Batch: MA10253

(2) Instrument QC Batch: MA10256

(3) Prep QC Batch: MP13206

(4) Prep QC Batch: MP13208

RL = Reporting Limit

Report of Analysis

Client Sample ID: 1117579UF**Lab Sample ID:** M81231-5**Matrix:** AQ - Ground Water**Date Sampled:** 03/12/09**Date Received:** 03/12/09**Percent Solids:** n/a**Project:** UTC:2009 Quarterly GW-F&H Buildings**Total Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Barium	< 200	200	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Cadmium	< 4.0	4.0	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Chromium	< 10	10	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Copper	< 25	25	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Lead	< 5.0	5.0	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	03/16/09	03/17/09 CF	SW846 7470A ²	SW846 7470A ⁴
Nickel	< 40	40	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Selenium	< 10	10	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Silver	< 5.0	5.0	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Zinc	< 20	20	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³

(1) Instrument QC Batch: MA10253

(2) Instrument QC Batch: MA10256

(3) Prep QC Batch: MP13206

(4) Prep QC Batch: MP13208

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1117579		
Lab Sample ID:	M81231-6	Date Sampled:	03/12/09
Matrix:	AQ - Ground Water	Date Received:	03/12/09
Method:	SW846 8260B	Percent Solids:	n/a
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G88972.D	1	03/23/09	EL	n/a	n/a	MSG3594
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1117579	Date Sampled:	03/12/09
Lab Sample ID:	M81231-6	Date Received:	03/12/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	37.3	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		78-129%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1117579		
Lab Sample ID:	M81231-6	Date Sampled:	03/12/09
Matrix:	AQ - Ground Water	Date Received:	03/12/09
Method:	SW846 8260B	Percent Solids:	n/a
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	113%		80-120%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1117579**Lab Sample ID:** M81231-6**Date Sampled:** 03/12/09**Matrix:** AQ - Ground Water**Date Received:** 03/12/09**Method:** CT-ETPH SW846 3510C**Percent Solids:** n/a**Project:** UTC:2009 Quarterly GW-F&H Buildings

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BC25815.D	1	03/17/09	DG	03/13/09	OP18064	GBC1421
Run #2							

	Initial Volume	Final Volume
Run #1	920 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
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	CT-DRO (C9-C36)	ND	0.087	mg/l	
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CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
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3386-33-2	1-Chlorooctadecane	80%		50-149%
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ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1117579		
Lab Sample ID:	M81231-6	Date Sampled:	03/12/09
Matrix:	AQ - Ground Water	Date Received:	03/12/09
Method:	SW846 8082 SW846 3510C	Percent Solids:	n/a
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB24438B.D	1	03/18/09	SL	03/16/09	OP18075	GBB1008
Run #2							

	Initial Volume	Final Volume
Run #1	800 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.31	ug/l	
11104-28-2	Aroclor 1221	ND	0.31	ug/l	
11141-16-5	Aroclor 1232	ND	0.31	ug/l	
53469-21-9	Aroclor 1242	ND	0.31	ug/l	
12672-29-6	Aroclor 1248	ND	0.31	ug/l	
11097-69-1	Aroclor 1254	ND	0.31	ug/l	
11096-82-5	Aroclor 1260	ND	0.31	ug/l	
37324-23-5	Aroclor 1262	ND	0.31	ug/l	
11100-14-4	Aroclor 1268	ND	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	101%		32-149%
877-09-8	Tetrachloro-m-xylene	89%		32-149%
2051-24-3	Decachlorobiphenyl	98%		30-150%
2051-24-3	Decachlorobiphenyl	131%		30-150%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1117583	Date Sampled:	03/12/09
Lab Sample ID:	M81231-7	Date Received:	03/12/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G88973.D	1	03/23/09	EL	n/a	n/a	MSG3594
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1117583	Date Sampled:	03/12/09
Lab Sample ID:	M81231-7	Date Received:	03/12/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		78-129%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1117583	Date Sampled:	03/12/09
Lab Sample ID:	M81231-7	Date Received:	03/12/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	116%		80-120%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1117582	Date Sampled:	03/12/09
Lab Sample ID:	M81231-8	Date Received:	03/12/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G88974.D	1	03/23/09	EL	n/a	n/a	MSG3594
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1117582	Date Sampled:	03/12/09
Lab Sample ID:	M81231-8	Date Received:	03/12/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		78-129%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1117582	Date Sampled:	03/12/09
Lab Sample ID:	M81231-8	Date Received:	03/12/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	114%		80-120%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1117582
Lab Sample ID: M81231-8
Matrix: AQ - Ground Water
Method: CT-ETPH SW846 3510C
Project: UTC:2009 Quarterly GW-F&H Buildings

Date Sampled: 03/12/09
Date Received: 03/12/09
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BC25816.D	1	03/17/09	DG	03/13/09	OP18064	GBC1421
Run #2							

	Initial Volume	Final Volume
Run #1	880 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	ND	0.091	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	75%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1117582		
Lab Sample ID:	M81231-8	Date Sampled:	03/12/09
Matrix:	AQ - Ground Water	Date Received:	03/12/09
Method:	SW846 8082 SW846 3510C	Percent Solids:	n/a
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB24438C.D	1	03/18/09	SL	03/16/09	OP18075	GBB1008
Run #2							

	Initial Volume	Final Volume
Run #1	750 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.33	ug/l	
11104-28-2	Aroclor 1221	ND	0.33	ug/l	
11141-16-5	Aroclor 1232	ND	0.33	ug/l	
53469-21-9	Aroclor 1242	ND	0.33	ug/l	
12672-29-6	Aroclor 1248	ND	0.33	ug/l	
11097-69-1	Aroclor 1254	ND	0.33	ug/l	
11096-82-5	Aroclor 1260	ND	0.33	ug/l	
37324-23-5	Aroclor 1262	ND	0.33	ug/l	
11100-14-4	Aroclor 1268	ND	0.33	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	107%		32-149%
877-09-8	Tetrachloro-m-xylene	93%		32-149%
2051-24-3	Decachlorobiphenyl	77%		30-150%
2051-24-3	Decachlorobiphenyl	103%		30-150%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1117582UF**Lab Sample ID:** M81231-9**Matrix:** AQ - Ground Water**Date Sampled:** 03/12/09**Date Received:** 03/12/09**Percent Solids:** n/a**Project:** UTC:2009 Quarterly GW-F&H Buildings**Total Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Barium	< 200	200	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Cadmium	< 4.0	4.0	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Chromium	< 10	10	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Copper	< 25	25	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Lead	< 5.0	5.0	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	03/16/09	03/17/09 CF	SW846 7470A ²	SW846 7470A ⁴
Nickel	< 40	40	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Selenium	< 10	10	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Silver	< 5.0	5.0	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Zinc	< 20	20	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³

(1) Instrument QC Batch: MA10253

(2) Instrument QC Batch: MA10256

(3) Prep QC Batch: MP13206

(4) Prep QC Batch: MP13208

RL = Reporting Limit



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Certification Exceptions (CT)
- Chain of Custody
- RCP Form
- Sample Tracking Chronicle

Parameter Certification Exceptions

Job Number: M81231
Account: LEA Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
Aroclor 1262	37324-23-5	SW846 8082	AQ	Certified by SOP MGC204/GC-ECD
Aroclor 1268	11100-14-4	SW846 8082	AQ	Certified by SOP MGC204/GC-ECD

4.1
4

Reasonable Confidence Protocol Laboratory Analysis QA/QC Certification Form

Laboratory Name: Accutest New England Client: Loureiro Eng. Associates

Project Location: UTC:2009 Quarterly GW-F&H Buildings Project Number: 88UT908

Sampling Date(s): 3/12/2009

Laboratory Sample ID(s): M81231-1, M81231-2, M81231-3, M81231-4, M81231-5, M81231-6, M81231-7, M81231-8, M81231-9

Methods: CT-ETPH, SW846 6010B, SW846 7470A, SW846 8082, SW846 8260B

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CTDEP method-specific Reasonable Confidence Protocol documents)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1A	Where all the method specified preservation and holding time requirements met?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1B	VPH and EPH methods only: Was the VPH or EPH method conducted without significant modifications (See section 11.3 of respective methods)	Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input checked="" type="checkbox"/>
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
3	Were samples received at an appropriate temperature (<6° C)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
4	Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
5	a) Were reporting limits specified or referenced on the chain-of-custody?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
	b) Were these reporting limits met?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Note: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence".

I, the undersigned, attest under pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized

Signature:

Position: Lab Director

Printed Name: Reza Tand

Accutest New England

Date: 3/25/2009

Internal Sample Tracking Chronicle

Loureiro Eng. Associates

Job No: M81231

UTC:2009 Quarterly GW-F&H Buildings

Project No: 88UT908

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M81231-1 1117577	Collected: 12-MAR-09 10:40	By: NE	Received: 12-MAR-09	By: JB		
M81231-1	CT-ETPH	17-MAR-09 16:49	DG	13-MAR-09 AJ		BCTTPH
M81231-1	SW846 8082	18-MAR-09 00:50	SL	16-MAR-09 FC		P8082RCP
M81231-1	SW846 8260B	23-MAR-09 13:38	EL			V8260RCP
M81231-2 1117577UF	Collected: 12-MAR-09 10:40	By: NE	Received: 12-MAR-09	By: JB		
M81231-2	SW846 6010B	17-MAR-09 12:49	EAL	16-MAR-09 EAL		AG,AS,BA,CD,CR,CU,NI,PB,SE, ZN
M81231-2	SW846 7470A	17-MAR-09 13:05	CF	16-MAR-09 CF		HG
M81231-3 1117578	Collected: 12-MAR-09 13:00	By: NE	Received: 12-MAR-09	By: JB		
M81231-3	CT-ETPH	17-MAR-09 17:28	DG	13-MAR-09 AJ		BCTTPH
M81231-3	SW846 8082	18-MAR-09 11:07	SL	16-MAR-09 FC		P8082RCP
M81231-3	SW846 8260B	23-MAR-09 14:05	EL			V8260RCP
M81231-4 1117578UF	Collected: 12-MAR-09 13:00	By: NE	Received: 12-MAR-09	By: JB		
M81231-4	SW846 6010B	17-MAR-09 10:57	EAL	16-MAR-09 EAL		AG,AS,BA,CD,CR,CU,NI,PB,SE, ZN
M81231-4	SW846 7470A	17-MAR-09 13:03	CF	16-MAR-09 CF		HG
M81231-5 1117579UF	Collected: 12-MAR-09 14:40	By: NE	Received: 12-MAR-09	By: JB		
M81231-5	SW846 6010B	17-MAR-09 11:39	EAL	16-MAR-09 EAL		AG,AS,BA,CD,CR,CU,NI,PB,SE, ZN
M81231-5	SW846 7470A	17-MAR-09 13:07	CF	16-MAR-09 CF		HG
M81231-6 1117579	Collected: 12-MAR-09 14:40	By: NE	Received: 12-MAR-09	By: JB		
M81231-6	CT-ETPH	17-MAR-09 18:08	DG	13-MAR-09 AJ		BCTTPH
M81231-6	SW846 8082	18-MAR-09 11:52	SL	16-MAR-09 FC		P8082RCP

Internal Sample Tracking Chronicle

Loureiro Eng. Associates

Job No: M81231

UTC:2009 Quarterly GW-F&H Buildings
Project No: 88UT908

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M81231-6	SW846 8260B	23-MAR-09 14:31	EL			V8260RCP
M81231-7 1117583	Collected: 12-MAR-09 09:00 By: NE		Received: 12-MAR-09 By: JB			
M81231-7	SW846 8260B	23-MAR-09 14:58	EL			V8260RCP
M81231-8 1117582	Collected: 12-MAR-09 14:30 By: NE		Received: 12-MAR-09 By: JB			
M81231-8	CT-ETPH	17-MAR-09 18:47	DG	13-MAR-09	AJ	BCTTPH
M81231-8	SW846 8082	18-MAR-09 12:30	SL	16-MAR-09	FC	P8082RCP
M81231-8	SW846 8260B	23-MAR-09 15:25	EL			V8260RCP
M81231-9 1117582UF	Collected: 12-MAR-09 14:30 By: NE		Received: 12-MAR-09 By: JB			
M81231-9	SW846 6010B	17-MAR-09 11:45	EAL	16-MAR-09	EAL	AG,AS,BA,CD,CR,CU,NI,PB,SE, ZN
M81231-9	SW846 7470A	17-MAR-09 13:09	CF	16-MAR-09	CF	HG



GC/MS Volatiles

5

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Page 1 of 3

Job Number: M81231
Account: LEA Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG3594-MB	G88968.D	1	03/23/09	EL	n/a	n/a	MSG3594

The QC reported here applies to the following samples:

Method: SW846 8260B

M81231-1, M81231-3, M81231-6, M81231-7, M81231-8

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	

Method Blank Summary

Page 2 of 3

Job Number: M81231
Account: LEA Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG3594-MB	G88968.D	1	03/23/09	EL	n/a	n/a	MSG3594

The QC reported here applies to the following samples:

Method: SW846 8260B

M81231-1, M81231-3, M81231-6, M81231-7, M81231-8

CAS No.	Compound	Result	RL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

Method Blank Summary

Page 3 of 3

Job Number: M81231
Account: LEA Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG3594-MB	G88968.D	1	03/23/09	EL	n/a	n/a	MSG3594

The QC reported here applies to the following samples:

Method: SW846 8260B

M81231-1, M81231-3, M81231-6, M81231-7, M81231-8

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	104% 78-129%
2037-26-5	Toluene-D8	100% 80-120%
460-00-4	4-Bromofluorobenzene	107% 80-120%

Method Blank Summary

Page 1 of 3

Job Number: M81231
Account: LEA Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG3594-MB1	G88988.D	1	03/24/09	EL	n/a	n/a	MSG3594

The QC reported here applies to the following samples:

Method: SW846 8260B

M81256-6MS, M81256-6MSD

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	

Method Blank Summary

Page 2 of 3

Job Number: M81231
Account: LEA Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG3594-MB1	G88988.D	1	03/24/09	EL	n/a	n/a	MSG3594

The QC reported here applies to the following samples:

Method: SW846 8260B

M81256-6MS, M81256-6MSD

CAS No.	Compound	Result	RL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

Method Blank Summary

Page 3 of 3

Job Number: M81231
Account: LEA Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG3594-MB1	G88988.D	1	03/24/09	EL	n/a	n/a	MSG3594

The QC reported here applies to the following samples:

Method: SW846 8260B

M81256-6MS, M81256-6MSD

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	102% 78-129%
2037-26-5	Toluene-D8	99% 80-120%
460-00-4	4-Bromofluorobenzene	111% 80-120%

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 3

Job Number: M81231**Account:** LEA Loureiro Eng. Associates**Project:** UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG3594-BS	G88965.D	1	03/23/09	EL	n/a	n/a	MSG3594
MSG3594-BSD	G88966.D	1	03/23/09	EL	n/a	n/a	MSG3594

The QC reported here applies to the following samples:**Method:** SW846 8260B

M81231-1, M81231-3, M81231-6, M81231-7, M81231-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	50	54.6	109	49.7	99	9	30-150/25
107-13-1	Acrylonitrile	250	261	104	263	105	1	60-145/25
71-43-2	Benzene	50	49.0	98	49.3	99	1	78-120/25
108-86-1	Bromobenzene	50	49.9	100	49.6	99	1	76-120/25
75-27-4	Bromodichloromethane	50	55.9	112	56.1	112	0	70-137/25
75-25-2	Bromoform	50	50.3	101	51.2	102	2	66-136/25
74-83-9	Bromomethane	50	47.4	95	48.7	97	3	50-143/25
78-93-3	2-Butanone (MEK)	50	52.6	105	50.8	102	3	53-150/25
104-51-8	n-Butylbenzene	50	51.5	103	52.3	105	2	70-141/25
135-98-8	sec-Butylbenzene	50	49.8	100	50.2	100	1	74-130/25
98-06-6	tert-Butylbenzene	50	49.0	98	49.2	98	0	73-134/25
75-15-0	Carbon disulfide	50	52.0	104	52.7	105	1	56-147/25
56-23-5	Carbon tetrachloride	50	51.8	104	52.5	105	1	64-151/25
108-90-7	Chlorobenzene	50	47.9	96	48.7	97	2	75-120/25
75-00-3	Chloroethane	50	48.5	97	48.9	98	1	50-160/25
67-66-3	Chloroform	50	50.0	100	50.6	101	1	73-130/25
74-87-3	Chloromethane	50	55.7	111	54.6	109	2	40-150/25
95-49-8	o-Chlorotoluene	50	48.5	97	48.5	97	0	75-125/25
106-43-4	p-Chlorotoluene	50	49.5	99	49.7	99	0	73-127/25
96-12-8	1,2-Dibromo-3-chloropropane	50	41.4	83	40.8	82	1	53-149/25
124-48-1	Dibromochloromethane	50	53.5	107	54.5	109	2	77-130/25
106-93-4	1,2-Dibromoethane	50	49.0	98	50.0	100	2	70-134/25
95-50-1	1,2-Dichlorobenzene	50	50.4	101	50.8	102	1	76-122/25
541-73-1	1,3-Dichlorobenzene	50	49.8	100	51.2	102	3	73-124/25
106-46-7	1,4-Dichlorobenzene	50	48.7	97	49.2	98	1	73-123/25
75-71-8	Dichlorodifluoromethane	50	58.9	118	59.2	118	1	10-150/25
75-34-3	1,1-Dichloroethane	50	50.0	100	50.2	100	0	71-130/25
107-06-2	1,2-Dichloroethane	50	53.5	107	53.7	107	0	63-145/25
75-35-4	1,1-Dichloroethene	50	48.7	97	48.6	97	0	70-128/25
156-59-2	cis-1,2-Dichloroethene	50	48.9	98	49.2	98	1	70-123/25
156-60-5	trans-1,2-Dichloroethene	50	50.2	100	50.8	102	1	70-126/25
78-87-5	1,2-Dichloropropane	50	51.0	102	51.2	102	0	76-124/25
142-28-9	1,3-Dichloropropane	50	49.5	99	49.7	99	0	79-123/25
594-20-7	2,2-Dichloropropane	50	53.3	107	53.9	108	1	30-150/25
563-58-6	1,1-Dichloropropene	50	50.1	100	50.7	101	1	76-128/25
10061-01-5	cis-1,3-Dichloropropene	50	52.0	104	52.1	104	0	70-138/25

Blank Spike/Blank Spike Duplicate Summary

Page 2 of 3

Job Number: M81231**Account:** LEA Loureiro Eng. Associates**Project:** UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG3594-BS	G88965.D	1	03/23/09	EL	n/a	n/a	MSG3594
MSG3594-BSD	G88966.D	1	03/23/09	EL	n/a	n/a	MSG3594

The QC reported here applies to the following samples:**Method:** SW846 8260B

M81231-1, M81231-3, M81231-6, M81231-7, M81231-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	50	52.7	105	53.2	106	1	61-140/25
100-41-4	Ethylbenzene	50	48.7	97	49.8	100	2	79-123/25
76-13-1	Freon 113	50	52.3	105	52.3	105	0	66-141/25
87-68-3	Hexachlorobutadiene	50	46.9	94	47.5	95	1	60-148/25
591-78-6	2-Hexanone	50	52.2	104	49.1	98	6	52-146/25
98-82-8	Isopropylbenzene	50	50.0	100	49.7	99	1	75-128/25
99-87-6	p-Isopropyltoluene	50	50.6	101	50.7	101	0	73-130/25
1634-04-4	Methyl Tert Butyl Ether	50	51.4	103	51.9	104	1	70-130/25
108-10-1	4-Methyl-2-pentanone (MIBK)	50	53.8	108	53.1	106	1	60-145/25
74-95-3	Methylene bromide	50	50.9	102	50.9	102	0	76-127/25
75-09-2	Methylene chloride	50	53.6	107	53.8	108	0	70-130/25
91-20-3	Naphthalene	50	44.7	89	44.2	88	1	62-140/25
103-65-1	n-Propylbenzene	50	50.8	102	50.8	102	0	73-130/25
100-42-5	Styrene	50	50.9	102	52.0	104	2	70-129/25
630-20-6	1,1,1,2-Tetrachloroethane	50	50.2	100	51.1	102	2	81-126/25
79-34-5	1,1,2,2-Tetrachloroethane	50	45.8	92	46.0	92	0	63-142/25
127-18-4	Tetrachloroethene	50	48.2	96	48.4	97	0	70-130/25
109-99-9	Tetrahydrofuran	50	49.5	99	49.7	99	0	50-147/25
108-88-3	Toluene	50	49.8	100	50.2	100	1	77-121/25
110-57-6	Trans-1,4-Dichloro-2-Butene	50	39.6	79	40.0	80	1	30-150/25
87-61-6	1,2,3-Trichlorobenzene	50	40.9	82	40.7	81	0	70-130/25
120-82-1	1,2,4-Trichlorobenzene	50	45.2	90	45.1	90	0	64-136/25
71-55-6	1,1,1-Trichloroethane	50	50.6	101	50.8	102	0	70-142/25
79-00-5	1,1,2-Trichloroethane	50	50.8	102	51.0	102	0	79-123/25
79-01-6	Trichloroethene	50	50.3	101	50.5	101	0	72-128/25
75-69-4	Trichlorofluoromethane	50	47.0	94	47.2	94	0	54-151/25
96-18-4	1,2,3-Trichloropropane	50	46.8	94	47.0	94	0	70-130/25
95-63-6	1,2,4-Trimethylbenzene	50	51.9	104	52.4	105	1	73-130/25
108-67-8	1,3,5-Trimethylbenzene	50	50.5	101	50.8	102	1	73-130/25
75-01-4	Vinyl chloride	50	59.7	119	60.5	121	1	45-150/25
	m,p-Xylene	100	98.6	99	100	100	1	74-127/25
95-47-6	o-Xylene	50	49.6	99	50.5	101	2	79-125/25

Blank Spike/Blank Spike Duplicate Summary

Page 3 of 3

Job Number: M81231

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG3594-BS	G88965.D	1	03/23/09	EL	n/a	n/a	MSG3594
MSG3594-BSD	G88966.D	1	03/23/09	EL	n/a	n/a	MSG3594

The QC reported here applies to the following samples:

Method: SW846 8260B

M81231-1, M81231-3, M81231-6, M81231-7, M81231-8

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	103%	104%	79-130%
2037-26-5	Toluene-D8	101%	101%	80-120%
460-00-4	4-Bromofluorobenzene	98%	97%	80-120%

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: M81231**Account:** LEA Loureiro Eng. Associates**Project:** UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M81256-6MS	G88994.D	1	03/24/09	EL	n/a	n/a	MSG3594
M81256-6MSD	G88995.D	1	03/24/09	EL	n/a	n/a	MSG3594
M81256-6	G88969.D	1	03/23/09	EL	n/a	n/a	MSG3594

The QC reported here applies to the following samples:**Method:** SW846 8260B

M81231-1, M81231-3, M81231-6, M81231-7, M81231-8

CAS No.	Compound	M81256-6 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	50	32.8	66	32.3	65	2	50-150/30
107-13-1	Acrylonitrile	ND	250	290	116	291	116	0	60-140/30
71-43-2	Benzene	ND	50	48.3	97	48.1	96	0	70-130/30
108-86-1	Bromobenzene	ND	50	48.5	97	49.2	98	1	73-122/30
75-27-4	Bromodichloromethane	ND	50	54.3	109	53.6	107	1	73-130/30
75-25-2	Bromoform	ND	50	47.3	95	47.7	95	1	50-131/30
74-83-9	Bromomethane	ND	50	47.2	94	45.4	91	4	50-148/30
78-93-3	2-Butanone (MEK)	ND	50	40.6	81	39.7	79	2	50-144/30
104-51-8	n-Butylbenzene	ND	50	46.5	93	47.8	96	3	70-130/30
135-98-8	sec-Butylbenzene	ND	50	47.2	94	48.7	97	3	70-130/30
98-06-6	tert-Butylbenzene	ND	50	47.6	95	48.6	97	2	70-130/30
75-15-0	Carbon disulfide	ND	50	44.1	88	41.9	84	5	50-147/30
56-23-5	Carbon tetrachloride	ND	50	51.3	103	51.3	103	0	62-148/30
108-90-7	Chlorobenzene	ND	50	47.7	95	47.6	95	0	74-126/30
75-00-3	Chloroethane	ND	50	50.6	101	48.2	96	5	55-150/30
67-66-3	Chloroform	ND	50	50.7	101	49.3	99	3	70-130/30
74-87-3	Chloromethane	ND	50	61.5	123	56.9	114	8	50-150/30
95-49-8	o-Chlorotoluene	ND	50	47.0	94	47.8	96	2	70-141/30
106-43-4	p-Chlorotoluene	ND	50	47.8	96	48.2	96	1	71-130/30
96-12-8	1,2-Dibromo-3-chloropropane	ND	50	45.6	91	46.0	92	1	50-139/30
124-48-1	Dibromochloromethane	ND	50	50.8	102	51.3	103	1	70-130/30
106-93-4	1,2-Dibromoethane	ND	50	49.6	99	50.2	100	1	74-126/30
95-50-1	1,2-Dichlorobenzene	ND	50	48.3	97	48.9	98	1	77-123/30
541-73-1	1,3-Dichlorobenzene	ND	50	48.6	97	49.2	98	1	76-124/30
106-46-7	1,4-Dichlorobenzene	ND	50	47.1	94	47.8	96	1	72-124/30
75-71-8	Dichlorodifluoromethane	ND	50	61.7	123	57.8	116	7	10-150/30
75-34-3	1,1-Dichloroethane	ND	50	51.6	103	50.0	100	3	64-142/30
107-06-2	1,2-Dichloroethane	ND	50	54.7	109	53.2	106	3	70-140/30
75-35-4	1,1-Dichloroethene	ND	50	49.2	98	48.0	96	2	62-144/30
156-59-2	cis-1,2-Dichloroethene	ND	50	48.5	97	47.4	95	2	70-138/30
156-60-5	trans-1,2-Dichloroethene	ND	50	50.3	101	50.0	100	1	70-130/30
78-87-5	1,2-Dichloropropane	ND	50	50.9	102	50.6	101	1	73-130/30
142-28-9	1,3-Dichloropropane	ND	50	49.3	99	49.9	100	1	75-123/30
594-20-7	2,2-Dichloropropane	ND	50	43.9	88	42.3	85	4	50-150/30
563-58-6	1,1-Dichloropropene	ND	50	50.3	101	50.2	100	0	71-130/30
10061-01-5	cis-1,3-Dichloropropene	ND	50	46.1	92	46.8	94	2	70-128/30

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: M81231
Account: LEA Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M81256-6MS	G88994.D	1	03/24/09	EL	n/a	n/a	MSG3594
M81256-6MSD	G88995.D	1	03/24/09	EL	n/a	n/a	MSG3594
M81256-6	G88969.D	1	03/23/09	EL	n/a	n/a	MSG3594

The QC reported here applies to the following samples:

Method: SW846 8260B

M81231-1, M81231-3, M81231-6, M81231-7, M81231-8

CAS No.	Compound	M81256-6 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	ND	50	47.0	94	47.7	95	1	70-124/30
100-41-4	Ethylbenzene	ND	50	48.3	97	48.6	97	1	70-130/30
76-13-1	Freon 113	ND	50	52.7	105	51.2	102	3	60-150/30
87-68-3	Hexachlorobutadiene	ND	50	43.2	86	44.3	89	3	60-127/30
591-78-6	2-Hexanone	ND	50	42.8	86	43.1	86	1	25-147/30
98-82-8	Isopropylbenzene	ND	50	48.5	97	49.9	100	3	70-130/30
99-87-6	p-Isopropyltoluene	ND	50	47.2	94	48.4	97	3	70-130/30
1634-04-4	Methyl Tert Butyl Ether	ND	50	51.3	103	50.4	101	2	61-143/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	50	59.5	119	59.2	118	1	60-144/30
74-95-3	Methylene bromide	ND	50	51.1	102	50.2	100	2	75-129/30
75-09-2	Methylene chloride	ND	50	52.4	105	50.8	102	3	70-143/30
91-20-3	Naphthalene	ND	50	35.0	70	41.2	82	16	50-138/30
103-65-1	n-Propylbenzene	ND	50	49.1	98	50.0	100	2	70-138/30
100-42-5	Styrene	ND	50	46.1	92	47.7	95	3	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND	50	49.0	98	49.2	98	0	72-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND	50	48.6	97	50.6	101	4	70-130/30
127-18-4	Tetrachloroethene	56.0	50	94.2	76	94.1	76	0	70-130/30
109-99-9	Tetrahydrofuran	ND	50	58.6	117	57.6	115	2	50-150/30
108-88-3	Toluene	ND	50	48.9	98	48.8	98	0	70-130/30
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	50	23.5	47	26.1	52	10	40-150/30
87-61-6	1,2,3-Trichlorobenzene	ND	50	33.5	67	36.3	73	8	53-128/30
120-82-1	1,2,4-Trichlorobenzene	ND	50	37.2	74	39.8	80	7	60-125/30
71-55-6	1,1,1-Trichloroethane	ND	50	51.4	103	50.2	100	2	70-148/30
79-00-5	1,1,2-Trichloroethane	ND	50	50.7	101	50.5	101	0	76-126/30
79-01-6	Trichloroethene	ND	50	50.7	101	49.9	100	2	70-130/30
75-69-4	Trichlorofluoromethane	ND	50	48.6	97	47.1	94	3	53-150/30
96-18-4	1,2,3-Trichloropropane	ND	50	42.8	86	45.5	91	6	61-129/30
95-63-6	1,2,4-Trimethylbenzene	ND	50	48.5	97	50.1	100	3	60-144/30
108-67-8	1,3,5-Trimethylbenzene	ND	50	47.6	95	49.1	98	3	64-137/30
75-01-4	Vinyl chloride	ND	50	63.8	128	59.9	120	6	50-150/30
	m,p-Xylene	ND	100	96.5	97	97.9	98	1	70-130/30
95-47-6	o-Xylene	ND	50	48.0	96	48.3	97	1	70-130/30

Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: M81231

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M81256-6MS	G88994.D	1	03/24/09	EL	n/a	n/a	MSG3594
M81256-6MSD	G88995.D	1	03/24/09	EL	n/a	n/a	MSG3594
M81256-6	G88969.D	1	03/23/09	EL	n/a	n/a	MSG3594

The QC reported here applies to the following samples:

Method: SW846 8260B

M81231-1, M81231-3, M81231-6, M81231-7, M81231-8

CAS No.	Surrogate Recoveries	MS	MSD	M81256-6	Limits
1868-53-7	Dibromofluoromethane	104%	102%	104%	78-129%
2037-26-5	Toluene-D8	100%	101%	99%	80-120%
460-00-4	4-Bromofluorobenzene	97%	99%	110%	80-120%

Volatile Internal Standard Area Summary

Page 1 of 1

Job Number: M81231
Account: LEA Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

Check Std: MSG3594-CC3531 **Injection Date:** 03/23/09
Lab File ID: G88964.D **Injection Time:** 10:58
Instrument ID: GCMSG **Method:** SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	198058	9.05	295970	9.91	168063	13.17	137624	15.73	70276	6.65
Upper Limit ^a	396116	9.55	591940	10.41	336126	13.67	275248	16.23	140552	7.15
Lower Limit ^b	99029	8.55	147985	9.41	84032	12.67	68812	15.23	35138	6.15

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSG3594-BS	197931	9.05	290966	9.92	160095	13.17	130442	15.73	70615	6.65
MSG3594-BSD	194314	9.05	284984	9.92	156229	13.17	130148	15.73	68005	6.65
MSG3594-MB	190912	9.05	281366	9.92	147084	13.17	105588	15.73	65061	6.66
M81256-6	188955	9.05	279621	9.92	142323	13.17	95200	15.74	53934	6.67
M81231-1	191277	9.05	285285	9.92	144161	13.17	92412	15.73	57894	6.66
M81231-3	181992	9.05	269373	9.92	136137	13.17	85213	15.73	61831	6.68
M81231-6	178677	9.05	262711	9.92	133319	13.17	85500	15.73	62868	6.67
M81231-7	171972	9.05	252933	9.92	127508	13.17	79043	15.73	59810	6.67
M81231-8	174304	9.05	255675	9.92	127241	13.17	80364	15.74	59788	6.66
ZZZZZZ	166449	9.05	247085	9.92	125773	13.17	79322	15.73	58748	6.67
ZZZZZZ	169979	9.05	250125	9.92	126852	13.17	77691	15.74	60737	6.67
ZZZZZZ	169544	9.05	248894	9.92	127537	13.17	83631	15.73	65072	6.67
ZZZZZZ	169659	9.05	249908	9.92	128016	13.17	83063	15.73	63089	6.67
ZZZZZZ	166655	9.05	246381	9.92	124229	13.17	85987	15.73	64144	6.67
ZZZZZZ	170905	9.05	252952	9.92	132743	13.17	105614	15.73	63119	6.66
ZZZZZZ	172496	9.05	255119	9.92	132806	13.17	106636	15.73	71763	6.66

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.

(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Page 1 of 1

Job Number: M81231
Account: LEA Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

Check Std: MSG3595-CC3531 **Injection Date:** 03/24/09
Lab File ID: G88984.D **Injection Time:** 09:48
Instrument ID: GCMSG **Method:** SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	182697	9.05	274694	9.91	155822	13.17	128945	15.73	61716	6.64
Upper Limit ^a	365394	9.55	549388	10.41	311644	13.67	257890	16.23	123432	7.14
Lower Limit ^b	91349	8.55	137347	9.41	77911	12.67	64473	15.23	30858	6.14

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSG3595-BS	188592	9.05	281576	9.92	151978	13.17	121702	15.73	59695	6.66
MSG3594-BS1	188592	9.05	281576	9.92	151978	13.17	121702	15.73	59695	6.66
MSG3595-BSD	193234	9.05	282054	9.92	153915	13.17	124642	15.73	65949	6.66
MSG3594-BSD1	193234	9.05	282054	9.92	153915	13.17	124642	15.73	65949	6.66
MSG3594-MB1	185871	9.05	272074	9.92	136044	13.17	90124	15.74	61554	6.67
MSG3595-MB	185871	9.05	272074	9.92	136044	13.17	90124	15.74	61554	6.67
ZZZZZZ	180534	9.05	267170	9.92	137068	13.17	91186	15.73	62841	6.67
ZZZZZZ	173934	9.05	253916	9.92	128507	13.17	83238	15.73	61333	6.66
ZZZZZZ	172678	9.05	251456	9.92	125328	13.17	82127	15.73	62986	6.67
M81264-4	173052	9.05	251371	9.92	125448	13.17	79048	15.73	67622	6.67
ZZZZZZ	175601	9.05	261307	9.92	131109	13.17	86965	15.74	65788	6.66
M81256-6MS	170101	9.05	254578	9.92	139138	13.17	113765	15.73	67372	6.65
M81256-6MSD	178913	9.05	261929	9.92	141243	13.17	111541	15.73	69832	6.65
ZZZZZZ	175757	9.05	260357	9.92	133851	13.17	87505	15.73	63057	6.66
ZZZZZZ	181873	9.05	268178	9.92	134817	13.17	86115	15.73	63050	6.66
ZZZZZZ	173044	9.05	250731	9.92	126489	13.17	86862	15.74	58825	6.66
ZZZZZZ	174164	9.05	254529	9.92	128221	13.17	81885	15.74	64396	6.66
ZZZZZZ	172593	9.05	253528	9.92	127894	13.17	79882	15.73	66970	6.67
ZZZZZZ	168613	9.05	248069	9.92	123429	13.18	76026	15.73	61557	6.67
ZZZZZZ	170315	9.05	252039	9.92	126940	13.17	79766	15.74	56285	6.67
ZZZZZZ	165432	9.05	245134	9.92	121621	13.17	74813	15.73	57272	6.67
ZZZZZZ	168319	9.05	246440	9.92	123884	13.17	79531	15.73	53099	6.66
ZZZZZZ	168513	9.05	249482	9.92	124069	13.18	80427	15.74	57336	6.67
M81264-4MS	166231	9.05	246240	9.92	133044	13.17	107162	15.73	59206	6.65
M81264-4MSD	172349	9.05	253861	9.92	135386	13.17	107150	15.73	62550	6.65

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Page 1 of 1

Job Number: M81231

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Method: SW846 8260B

Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
M81231-1	G88970.D	105.0	99.0	114.0
M81231-3	G88971.D	104.0	99.0	116.0
M81231-6	G88972.D	103.0	99.0	113.0
M81231-7	G88973.D	103.0	100.0	116.0
M81231-8	G88974.D	103.0	99.0	114.0
M81256-6MS	G88994.D	104.0	100.0	97.0
M81256-6MSD	G88995.D	102.0	101.0	99.0
MSG3594-BS	G88965.D	103.0	101.0	98.0
MSG3594-BSD	G88966.D	104.0	101.0	97.0
MSG3594-MB	G88968.D	104.0	100.0	107.0
MSG3594-MB1	G88988.D	102.0	99.0	111.0

Surrogate Compounds

Recovery Limits

S1 = Dibromofluoromethane

78-129%

S2 = Toluene-D8

80-120%

S3 = 4-Bromofluorobenzene

80-120%

5.5.1

5



GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Page 1 of 1

Job Number: M81231
Account: LEA Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP18064-MB	BC25800.D	1	03/16/09	DG	03/13/09	OP18064	GBC1421

The QC reported here applies to the following samples:

Method: CT-ETPH

M81231-1, M81231-3, M81231-6, M81231-8

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	ND	0.080	mg/l	

CAS No.	Surrogate Recoveries	Limits
3386-33-2	1-Chlorooctadecane	69% 50-149%

Method Blank Summary

Page 1 of 1

Job Number: M81231

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP18075-MB	BB24427A.D 1		03/17/09	SL	03/16/09	OP18075	GBB1008

The QC reported here applies to the following samples:

Method: SW846 8082

M81231-1, M81231-3, M81231-6, M81231-8

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries	Limits	
877-09-8	Tetrachloro-m-xylene	123%	32-149%
877-09-8	Tetrachloro-m-xylene	107%	32-149%
2051-24-3	Decachlorobiphenyl	114%	30-150%
2051-24-3	Decachlorobiphenyl	111%	30-150%

Blank Spike Summary

Page 1 of 1

Job Number: M81231

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP18064-BS	BC25801C.D1		03/17/09	DG	03/13/09	OP18064	GBC1421

The QC reported here applies to the following samples:

Method: CT-ETPH

M81231-1, M81231-3, M81231-6, M81231-8

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	CT-DRO (C9-C36)	0.7	0.568	81	60-120

CAS No.	Surrogate Recoveries	BSP	Limits
3386-33-2	1-Chlorooctadecane	78%	50-149%

6.2.1

6

Blank Spike Summary

Page 1 of 1

Job Number: M81231

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP18075-BSP	BB24428A.D 1		03/17/09	SL	03/16/09	OP18075	GBB1008

The QC reported here applies to the following samples:

Method: SW846 8082

M81231-1, M81231-3, M81231-6, M81231-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
12674-11-2	Aroclor 1016	2	2.1	105	55-140
11104-28-2	Aroclor 1221		ND		40-140
11141-16-5	Aroclor 1232		ND		40-140
53469-21-9	Aroclor 1242		ND		40-140
12672-29-6	Aroclor 1248		ND		40-140
11097-69-1	Aroclor 1254		ND		40-140
11096-82-5	Aroclor 1260	2	2.4	120	61-140
37324-23-5	Aroclor 1262		ND		40-140
11100-14-4	Aroclor 1268		ND		40-140

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	123%	32-149%
877-09-8	Tetrachloro-m-xylene	107%	32-149%
2051-24-3	Decachlorobiphenyl	104%	30-150%
2051-24-3	Decachlorobiphenyl	113%	30-150%

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: M81231

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP18064-MS	BC25802.D	1	03/17/09	DG	03/13/09	OP18064	GBC1421
OP18064-MSD	BC25803.D	1	03/17/09	DG	03/13/09	OP18064	GBC1421
M81179-16	BC25804.D	1	03/17/09	DG	03/13/09	OP18064	GBC1421

The QC reported here applies to the following samples:

Method: CT-ETPH

M81231-1, M81231-3, M81231-6, M81231-8

CAS No.	Compound	M81179-16 mg/l	Spike Q	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	CT-DRO (C9-C36)	ND	0.7	0.600	86	0.562	80	7	50-129/26

CAS No.	Surrogate Recoveries	MS	MSD	M81179-16	Limits
3386-33-2	1-Chlorooctadecane	76%	75%	68%	50-149%

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: M81231

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP18075-MS	BB24429.D	1	03/17/09	SL	03/16/09	OP18075	GBB1008
OP18075-MSD	BB24430.D	1	03/17/09	SL	03/16/09	OP18075	GBB1008
M81296-5	BB24431.D	1	03/18/09	SL	03/16/09	OP18075	GBB1008

The QC reported here applies to the following samples:

Method: SW846 8082

M81231-1, M81231-3, M81231-6, M81231-8

CAS No.	Compound	M81296-5 ug/l	Spike Q	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND	2	2.1	105	2.1	105	0	53-140/36
11104-28-2	Aroclor 1221	ND		ND		ND		nc	40-140/50
11141-16-5	Aroclor 1232	ND		ND		ND		nc	40-140/50
53469-21-9	Aroclor 1242	ND		ND		ND		nc	40-140/50
12672-29-6	Aroclor 1248	ND		ND		ND		nc	40-140/50
11097-69-1	Aroclor 1254	ND		ND		ND		nc	40-140/50
11096-82-5	Aroclor 1260	ND	2	2.3	115	2.4	120	4	54-140/27
37324-23-5	Aroclor 1262	ND		ND		ND		nc	40-140/20
11100-14-4	Aroclor 1268	ND		ND		ND		nc	40-140/50

CAS No.	Surrogate Recoveries	MS	MSD	M81296-5	Limits
877-09-8	Tetrachloro-m-xylene	116%	116%	122%	32-149%
877-09-8	Tetrachloro-m-xylene	102%	103%	108%	32-149%
2051-24-3	Decachlorobiphenyl	108%	114%	99%	30-150%
2051-24-3	Decachlorobiphenyl	107%	108%	111%	30-150%

Semivolatile Surrogate Recovery Summary

Page 1 of 1

Job Number: M81231

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Method: CT-ETPH

Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a
M81231-1	BC25813.D	84.0
M81231-3	BC25814.D	85.0
M81231-6	BC25815.D	80.0
M81231-8	BC25816.D	75.0
OP18064-BS	BC25801C.D	78.0
OP18064-MB	BC25800.D	69.0
OP18064-MS	BC25802.D	76.0
OP18064-MSD	BC25803.D	75.0

Surrogate Compounds	Recovery Limits
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S1 = 1-Chlorooctadecane	50-149%
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(a) Recovery from GC signal #1

6.4.1

6

Semivolatile Surrogate Recovery Summary

Page 1 of 1

Job Number: M81231

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Method: SW846 8082

Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S1 ^b	S2 ^a	S2 ^b
M81231-1	BB24432.D	127.0	112.0	104.0	143.0
M81231-3	BB24438A.D	108.0	95.0	102.0	134.0
M81231-6	BB24438B.D	101.0	89.0	98.0	131.0
M81231-8	BB24438C.D	107.0	93.0	77.0	103.0
OP18075-BSP	BB24428A.D	123.0	107.0	104.0	113.0
OP18075-MB	BB24427A.D	123.0	107.0	114.0	111.0
OP18075-MS	BB24429.D	116.0	102.0	108.0	107.0
OP18075-MSD	BB24430.D	116.0	103.0	114.0	108.0

Surrogate Compounds

Recovery Limits

S1 = Tetrachloro-m-xylene

32-149%

S2 = Decachlorobiphenyl

30-150%

(a) Recovery from GC signal #1

(b) Recovery from GC signal #2

6.4.2

6



Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M81231
Account: LEA - Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

QC Batch ID: MP13206
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 03/16/09

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	14	31		
Antimony	6.0	2.9	3		
Arsenic	10	2.7	3.2	-1.8	<10
Barium	200	.64	1.2	0.52	<200
Beryllium	4.0	.17	.3		
Boron	100	2.3	4.8		
Cadmium	4.0	.24	.3	-0.080	<4.0
Calcium	5000	4.7	40		
Chromium	10	.51	1.4	0.16	<10
Cobalt	50	.76	1		
Copper	25	1.1	1.8	-1.5	<25
Iron	100	11	29		
Lead	5.0	1.3	1.8	-1.3	<5.0
Magnesium	5000	8	10		
Manganese	15	.17	1.3		
Molybdenum	100	.5	1.4		
Nickel	40	.65	1	0.39	<40
Potassium	5000	25	31		
Selenium	10	1.6	3.3	1.5	<10
Silver	5.0	.64	.7	0.080	<5.0
Sodium	5000	99	210		
Strontium	10	.12	.3		
Thallium	10	2	4.5		
Tin	100	1.6	9.9		
Titanium	50	4.1	5.1		
Tungsten	100	5.4	7		
Vanadium	30	.65	3.5		
Zinc	20	1.1	1.3	1.4	<20

Associated samples MP13206: M81231-2, M81231-4, M81231-5, M81231-9

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M81231
 Account: LEA - Loureiro Eng. Associates
 Project: UTC:2009 Quarterly GW-F&H Buildings

QC Batch ID: MP13206
 Matrix Type: AQUEOUS

Methods: SW846 6010B
 Units: ug/l

Prep Date: 03/16/09 03/16/09

Metal	M81231-4 Original MS		Spikelot MPICP	% Rec	QC Limits	M81231-4 Original DUP		RPD	QC Limits
Aluminum									
Antimony									
Arsenic	0.0	532	500	106.4	75-125	0.0	0.0	NC	0-20
Barium	129	2130	2000	100.1	75-125	129	129	0.0	0-20
Beryllium									
Boron									
Cadmium	0.0	517	500	103.4	75-125	0.0	0.0	NC	0-20
Calcium									
Chromium	13.7	528	500	102.9	75-125	13.7	13.4	2.2	0-20
Cobalt									
Copper	8.4	539	500	106.1	75-125	8.4	8.5	1.2	0-20
Iron									
Lead	0.0	1030	1000	103.0	75-125	0.0	0.0	NC	0-20
Magnesium									
Manganese									
Molybdenum									
Nickel	3.1	507	500	100.8	75-125	3.1	3.3	6.2	0-20
Potassium									
Selenium	0.0	533	500	106.6	75-125	0.0	3.0	200.0(a)	0-20
Silver	0.0	203	200	101.5	75-125	0.0	0.0	NC	0-20
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Tungsten									
Vanadium									
Zinc	4.8	523	500	103.6	75-125	4.8	4.8	0.0	0-20

Associated samples MP13206: M81231-2, M81231-4, M81231-5, M81231-9

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) RPD acceptable due to low duplicate and sample concentrations.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M81231
 Account: LEA - Loureiro Eng. Associates
 Project: UTC:2009 Quarterly GW-F&H Buildings

QC Batch ID: MP13206
 Matrix Type: AQUEOUS

Methods: SW846 6010B
 Units: ug/l

Prep Date:

03/16/09

03/16/09

Metal	BSP Result	Spikelot MPICP	% Rec	QC Limits	BSD Result	Spikelot MPICP	% Rec	BSD RPD	QC Limit
Aluminum									
Antimony									
Arsenic	510	500	102.0	80-120	521	500	104.2	2.1	20
Barium	1950	2000	97.5	80-120	1970	2000	98.5	1.0	20
Beryllium									
Boron									
Cadmium	506	500	101.2	80-120	518	500	103.6	2.3	20
Calcium									
Chromium	505	500	101.0	80-120	512	500	102.4	1.4	20
Cobalt									
Copper	508	500	101.6	80-120	517	500	103.4	1.8	20
Iron									
Lead	1000	1000	100.0	80-120	1020	1000	102.0	2.0	20
Magnesium									
Manganese									
Molybdenum									
Nickel	493	500	98.6	80-120	502	500	100.4	1.8	20
Potassium									
Selenium	520	500	104.0	80-120	526	500	105.2	1.1	20
Silver	198	200	99.0	80-120	200	200	100.0	1.0	20
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Tungsten									
Vanadium									
Zinc	507	500	101.4	80-120	521	500	104.2	2.7	20

Associated samples MP13206: M81231-2, M81231-4, M81231-5, M81231-9

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: M81231
 Account: LEA - Loureiro Eng. Associates
 Project: UTC:2009 Quarterly GW-F&H Buildings

QC Batch ID: MP13206
 Matrix Type: AQUEOUS

Methods: SW846 6010B
 Units: ug/l

Prep Date: 03/16/09

Metal	M81231-4 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic	0.00	0.00	NC	0-10
Barium	129	130	0.9	0-10
Beryllium				
Boron				
Cadmium	0.00	0.00	NC	0-10
Calcium				
Chromium	13.7	11.4	16.8 (a)	0-10
Cobalt				
Copper	8.35	0.00	100.0(a)	0-10
Iron				
Lead	0.00	0.00	NC	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel	3.06	0.00	100.0(a)	0-10
Potassium				
Selenium	0.00	0.00	NC	0-10
Silver	0.00	0.00	NC	0-10
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium				
Zinc	4.79	0.00	100.0(a)	0-10

Associated samples MP13206: M81231-2, M81231-4, M81231-5, M81231-9

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M81231
Account: LEA - Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

QC Batch ID: MP13208
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 03/16/09

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.035	.048	-0.076	<0.20

Associated samples MP13208: M81231-2, M81231-4, M81231-5, M81231-9

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

7.2.1

7

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M81231
 Account: LEA - Loureiro Eng. Associates
 Project: UTC:2009 Quarterly GW-F&H Buildings

QC Batch ID: MP13208
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 03/16/09 03/16/09

Metal	M81231-4 Original MS		Spikelot HGRWS1 % Rec		QC Limits	M81231-4 Original DUP		RPD	QC Limits
Mercury	0.0	3.0	3	100.0	75-125	0.0	0.0	NC	0-20

Associated samples MP13208: M81231-2, M81231-4, M81231-5, M81231-9

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

7.2.2

7

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M81231
 Account: LEA - Loureiro Eng. Associates
 Project: UTC:2009 Quarterly GW-F&H Buildings

QC Batch ID: MP13208
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 03/16/09

03/16/09

Metal	BSP Result	Spikelot HGRWS1	% Rec	QC Limits	BSD Result	Spikelot HGRWS1	% Rec	BSD RPD	QC Limit
Mercury	3.1	3	103.3	80-120	3.2	3	106.7	3.2	20

Associated samples MP13208: M81231-2, M81231-4, M81231-5, M81231-9

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

7.2.3

7



01/19/10

IT'S ALL IN THE CHEMISTRY

01/19/10

Technical Report for

Loureiro Eng. Associates

UTC:2009 Quarterly GW-F&H Buildings

88UT908

Accutest Job Number: M81232

Sampling Date: 03/12/09

Report to:

Loureiro Eng. Associates

hmgrimm@loureiro.com

ATTN: Heather Grimm

Total number of pages in report: 69



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Reza Fand
Lab Director

Client Service contact: Kristen Blanchard 508-481-6200

Certifications: MA (M-MA136) CT (PH-0109) NH (2502) RI (00071) ME (MA0136) FL (E87579)
NY (11791) NJ (MA926) NC (653) IL (200018) NAVY USACE

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Test results relate only to samples analyzed.

Table of Contents

-1-

Section 1: Sample Summary	3
Section 2: Case Narrative/Conformance Summary	4
Section 3: Sample Results	6
3.1: M81232-1: 1117574	7
3.2: M81232-2: 1117574UF	12
3.3: M81232-3: 1117575	13
3.4: M81232-4: 1117575UF	18
3.5: M81232-5: 1117576	19
3.6: M81232-6: 1117576UF	24
3.7: M81232-7: 1117581	25
3.8: M81232-8: 1117581UF	30
Section 4: Misc. Forms	31
4.1: Certification Exceptions	32
4.2: Chain of Custody	33
4.3: RCP Form	34
4.4: Sample Tracking Chronicle	35
Section 5: GC/MS Volatiles - QC Data Summaries	37
5.1: Method Blank Summary	38
5.2: Blank Spike/Blank Spike Duplicate Summary	44
5.3: Matrix Spike/Matrix Spike Duplicate Summary	47
5.4: Internal Standard Area Summaries	50
5.5: Surrogate Recovery Summaries	52
Section 6: GC Semi-volatiles - QC Data Summaries	53
6.1: Method Blank Summary	54
6.2: Blank Spike Summary	56
6.3: Matrix Spike/Matrix Spike Duplicate Summary	58
6.4: Surrogate Recovery Summaries	60
Section 7: Metals Analysis - QC Data Summaries	62
7.1: Prep QC MP13206: As,Ba,Cd,Cr,Cu,Pb,Ni,Se,Ag,Zn	63
7.2: Prep QC MP13208: Hg	67



Sample Summary

Loureiro Eng. Associates

Job No: M81232

UTC:2009 Quarterly GW-F&H Buildings
Project No: 88UT908

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
M81232-1	03/12/09	09:35 BG	03/12/09	AQ	Ground Water	1117574
M81232-2	03/12/09	09:35 BG	03/12/09	AQ	Ground Water	1117574UF
M81232-3	03/12/09	11:50 BG	03/12/09	AQ	Ground Water	1117575
M81232-4	03/12/09	11:50 BG	03/12/09	AQ	Ground Water	1117575UF
M81232-5	03/12/09	14:19 BG	03/12/09	AQ	Ground Water	1117576
M81232-6	03/12/09	14:19 BG	03/12/09	AQ	Ground Water	1117576UF
M81232-7	03/12/09	14:19 BG	03/12/09	AQ	Ground Water	1117581
M81232-8	03/12/09	14:19 BG	03/12/09	AQ	Ground Water	1117581UF

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Loureiro Eng. Associates

Job No M81232

Site: UTC:2009 Quarterly GW-F&H Buildings

Report Date 3/25/2009 2:37:15 PM

8 Sample(s) were collected on 03/12/2009 and were received at Accutest on 03/12/2009 properly preserved, at 1.9 Deg. C and intact. These Samples received an Accutest job number of M81232. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix AQ	Batch ID: MSG3594
------------------	--------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Continuing calibration check standard for naphthalene, 1,2,3-trichlorobenzene exceed 30% Difference. This check standard met RCP criteria.
- Initial calibration standard (batch MSG3531) for chloromethane, bromomethane, 1,1-dichloroethene, acetone, trans-1,2-dichloroethene, cis-1,2-dichloroethene, trans-1,4-dichloro-2-butene, naphthalene is employed quadratic regression.
- MS/MSD has compounds exceed RCP control limits (70-130%), but within in-house control limits. Refer to MS/MSD spike summary pages for detail.

Extractables by GC By Method CT-ETPH

Matrix AQ	Batch ID: OP18064
------------------	--------------------------

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) M81179-16MS, M81179-16MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Extractables by GC By Method SW846 8082

Matrix AQ	Batch ID: OP18075
------------------	--------------------------

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) OP18075-MS/MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Metals By Method SW846 6010B

Matrix AQ

Batch ID: MP13206

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M81231-4DUP, M81231-4MS, M81231-4SDL were used as the QC samples for metals.
- RPD(s) for Duplicate for Selenium are outside control limits for sample MP13206-D1. RPD acceptable due to low duplicate and sample concentrations.
- RPD(s) for Serial Dilution for Chromium, Copper, Nickel, Zinc are outside control limits for sample MP13206-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- Only selected metals requested.

Metals By Method SW846 7470A

Matrix AQ

Batch ID: MP13208

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M81231-4DUP, M81231-4MS were used as the QC samples for metals.

Note: Compounds whose reported QC limits are outside the CT Recommended Reasonable Confidence Protocol QC criteria are designated by the lab as "Problem Compounds". QC criteria for a "Problem Compound" may meet Accutest in-house generated QC criteria but exceed the RCP criteria (compounds exceeding Accutest QC criteria are flagged on the QC summary). Refer to the QC summary pages.

Unless otherwise noted, sample dilutions are performed in order to report the result within the calibration range.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety. The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report (M81232).



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Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	1117574	Date Sampled:	03/12/09
Lab Sample ID:	M81232-1	Date Received:	03/12/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G88975.D	1	03/23/09	EL	n/a	n/a	MSG3594
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1117574	Date Sampled:	03/12/09
Lab Sample ID:	M81232-1	Date Received:	03/12/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	18.3	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	3.5	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	1.3	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		78-129%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1117574		
Lab Sample ID:	M81232-1	Date Sampled:	03/12/09
Matrix:	AQ - Ground Water	Date Received:	03/12/09
Method:	SW846 8260B	Percent Solids:	n/a
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	115%		80-120%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1117574						
Lab Sample ID:	M81232-1					Date Sampled:	03/12/09
Matrix:	AQ - Ground Water					Date Received:	03/12/09
Method:	CT-ETPH SW846 3510C					Percent Solids:	n/a
Project:	UTC:2009 Quarterly GW-F&H Buildings						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BC25817.D	1	03/17/09	DG	03/13/09	OP18064	GBC1421
Run #2							

	Initial Volume	Final Volume
Run #1	940 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	0.252	0.085	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
3386-33-2	1-Chlorooctadecane	80%		50-149%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1117574		
Lab Sample ID:	M81232-1	Date Sampled:	03/12/09
Matrix:	AQ - Ground Water	Date Received:	03/12/09
Method:	SW846 8082 SW846 3510C	Percent Solids:	n/a
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB24438D.D	1	03/18/09	SL	03/16/09	OP18075	GBB1008
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.26	ug/l	
11104-28-2	Aroclor 1221	ND	0.26	ug/l	
11141-16-5	Aroclor 1232	ND	0.26	ug/l	
53469-21-9	Aroclor 1242	ND	0.26	ug/l	
12672-29-6	Aroclor 1248	ND	0.26	ug/l	
11097-69-1	Aroclor 1254	ND	0.26	ug/l	
11096-82-5	Aroclor 1260	ND	0.26	ug/l	
37324-23-5	Aroclor 1262	ND	0.26	ug/l	
11100-14-4	Aroclor 1268	ND	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	109%		32-149%
877-09-8	Tetrachloro-m-xylene	96%		32-149%
2051-24-3	Decachlorobiphenyl	97%		30-150%
2051-24-3	Decachlorobiphenyl	134%		30-150%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1117574UF

Lab Sample ID: M81232-2

Date Sampled: 03/12/09

Matrix: AQ - Ground Water

Date Received: 03/12/09

Percent Solids: n/a

Project: UTC:2009 Quarterly GW-F&H Buildings

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Barium	< 200	200	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Cadmium	< 4.0	4.0	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Chromium	< 10	10	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Copper	< 25	25	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Lead	< 5.0	5.0	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	03/16/09	03/17/09 CF	SW846 7470A ²	SW846 7470A ⁴
Nickel	< 40	40	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Selenium	< 10	10	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Silver	< 5.0	5.0	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Zinc	< 20	20	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³

(1) Instrument QC Batch: MA10253

(2) Instrument QC Batch: MA10256

(3) Prep QC Batch: MP13206

(4) Prep QC Batch: MP13208

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1117575	Date Sampled:	03/12/09
Lab Sample ID:	M81232-3	Date Received:	03/12/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G88976.D	1	03/23/09	EL	n/a	n/a	MSG3594
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1117575	Date Sampled:	03/12/09
Lab Sample ID:	M81232-3	Date Received:	03/12/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	2.8	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	4.6	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		78-129%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1117575	Date Sampled:	03/12/09
Lab Sample ID:	M81232-3	Date Received:	03/12/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	116%		80-120%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1117575
Lab Sample ID: M81232-3
Matrix: AQ - Ground Water
Method: CT-ETPH SW846 3510C
Project: UTC:2009 Quarterly GW-F&H Buildings

Date Sampled: 03/12/09
Date Received: 03/12/09
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BC25818.D	1	03/17/09	DG	03/13/09	OP18064	GBC1421
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	0.242	0.084	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	76%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1117575		
Lab Sample ID:	M81232-3	Date Sampled:	03/12/09
Matrix:	AQ - Ground Water	Date Received:	03/12/09
Method:	SW846 8082 SW846 3510C	Percent Solids:	n/a
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB24438E.D	1	03/18/09	SL	03/16/09	OP18075	GBB1008
Run #2							

	Initial Volume	Final Volume
Run #1	980 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.26	ug/l	
11104-28-2	Aroclor 1221	ND	0.26	ug/l	
11141-16-5	Aroclor 1232	ND	0.26	ug/l	
53469-21-9	Aroclor 1242	ND	0.26	ug/l	
12672-29-6	Aroclor 1248	ND	0.26	ug/l	
11097-69-1	Aroclor 1254	ND	0.26	ug/l	
11096-82-5	Aroclor 1260	ND	0.26	ug/l	
37324-23-5	Aroclor 1262	ND	0.26	ug/l	
11100-14-4	Aroclor 1268	ND	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	107%		32-149%
877-09-8	Tetrachloro-m-xylene	94%		32-149%
2051-24-3	Decachlorobiphenyl	98%		30-150%
2051-24-3	Decachlorobiphenyl	132%		30-150%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1117575UF**Lab Sample ID:** M81232-4**Date Sampled:** 03/12/09**Matrix:** AQ - Ground Water**Date Received:** 03/12/09**Percent Solids:** n/a**Project:** UTC:2009 Quarterly GW-F&H Buildings**Total Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Barium	< 200	200	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Cadmium	< 4.0	4.0	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Chromium	< 10	10	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Copper	< 25	25	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Lead	< 5.0	5.0	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	03/16/09	03/17/09 CF	SW846 7470A ²	SW846 7470A ⁴
Nickel	< 40	40	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Selenium	< 10	10	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Silver	< 5.0	5.0	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Zinc	< 20	20	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³

(1) Instrument QC Batch: MA10253

(2) Instrument QC Batch: MA10256

(3) Prep QC Batch: MP13206

(4) Prep QC Batch: MP13208

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1117576	Date Sampled:	03/12/09
Lab Sample ID:	M81232-5	Date Received:	03/12/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G88977.D	1	03/23/09	EL	n/a	n/a	MSG3594
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1117576	Date Sampled:	03/12/09
Lab Sample ID:	M81232-5	Date Received:	03/12/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	1.5	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		78-129%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1117576	Date Sampled:	03/12/09
Lab Sample ID:	M81232-5	Date Received:	03/12/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	112%		80-120%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: 1117576
Lab Sample ID: M81232-5
Matrix: AQ - Ground Water
Method: CT-ETPH SW846 3510C
Project: UTC:2009 Quarterly GW-F&H Buildings

Date Sampled: 03/12/09
Date Received: 03/12/09
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BC25819.D	1	03/17/09	DG	03/13/09	OP18064	GBC1421
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	0.544	0.084	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	83%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1117576		
Lab Sample ID:	M81232-5	Date Sampled:	03/12/09
Matrix:	AQ - Ground Water	Date Received:	03/12/09
Method:	SW846 8082 SW846 3510C	Percent Solids:	n/a
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB24439.D	1	03/18/09	SL	03/16/09	OP18075	GBB1008
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	105%		32-149%
877-09-8	Tetrachloro-m-xylene	91%		32-149%
2051-24-3	Decachlorobiphenyl	99%		30-150%
2051-24-3	Decachlorobiphenyl	128%		30-150%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1117576UF

Lab Sample ID: M81232-6

Date Sampled: 03/12/09

Matrix: AQ - Ground Water

Date Received: 03/12/09

Percent Solids: n/a

Project: UTC:2009 Quarterly GW-F&H Buildings

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Barium	< 200	200	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Cadmium	< 4.0	4.0	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Chromium	< 10	10	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Copper	< 25	25	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Lead	< 5.0	5.0	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	03/16/09	03/17/09 CF	SW846 7470A ²	SW846 7470A ⁴
Nickel	< 40	40	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Selenium	< 10	10	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Silver	< 5.0	5.0	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Zinc	< 20	20	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³

(1) Instrument QC Batch: MA10253

(2) Instrument QC Batch: MA10256

(3) Prep QC Batch: MP13206

(4) Prep QC Batch: MP13208

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1117581	Date Sampled:	03/12/09
Lab Sample ID:	M81232-7	Date Received:	03/12/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G88978.D	1	03/23/09	EL	n/a	n/a	MSG3594
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1117581	Date Sampled:	03/12/09
Lab Sample ID:	M81232-7	Date Received:	03/12/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	1.6	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		78-129%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1117581	Date Sampled:	03/12/09
Lab Sample ID:	M81232-7	Date Received:	03/12/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	113%		80-120%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1117581						
Lab Sample ID:	M81232-7					Date Sampled:	03/12/09
Matrix:	AQ - Ground Water					Date Received:	03/12/09
Method:	CT-ETPH SW846 3510C					Percent Solids:	n/a
Project:	UTC:2009 Quarterly GW-F&H Buildings						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BC25820.D	1	03/17/09	DG	03/13/09	OP18064	GBC1421
Run #2							

	Initial Volume	Final Volume
Run #1	930 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	0.576	0.086	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
3386-33-2	1-Chlorooctadecane	87%		50-149%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1117581
Lab Sample ID: M81232-7
Matrix: AQ - Ground Water
Method: SW846 8082 SW846 3510C
Project: UTC:2009 Quarterly GW-F&H Buildings

Date Sampled: 03/12/09
Date Received: 03/12/09
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB24440.D	1	03/18/09	SL	03/16/09	OP18075	GBB1008
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	87%		32-149%
877-09-8	Tetrachloro-m-xylene	76%		32-149%
2051-24-3	Decachlorobiphenyl	76%		30-150%
2051-24-3	Decachlorobiphenyl	104%		30-150%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1117581UF

Lab Sample ID: M81232-8

Date Sampled: 03/12/09

Matrix: AQ - Ground Water

Date Received: 03/12/09

Percent Solids: n/a

Project: UTC:2009 Quarterly GW-F&H Buildings

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Barium	< 200	200	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Cadmium	< 4.0	4.0	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Chromium	< 10	10	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Copper	< 25	25	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Lead	< 5.0	5.0	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	03/16/09	03/17/09 CF	SW846 7470A ²	SW846 7470A ⁴
Nickel	< 40	40	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Selenium	< 10	10	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Silver	< 5.0	5.0	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³
Zinc	< 20	20	ug/l	1	03/16/09	03/17/09 EAL	SW846 6010B ¹	SW846 3010A ³

(1) Instrument QC Batch: MA10253

(2) Instrument QC Batch: MA10256

(3) Prep QC Batch: MP13206

(4) Prep QC Batch: MP13208

RL = Reporting Limit



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Certification Exceptions (CT)
- Chain of Custody
- RCP Form
- Sample Tracking Chronicle

Parameter Certification Exceptions

Job Number: M81232
Account: LEA Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
Aroclor 1262	37324-23-5	SW846 8082	AQ	Certified by SOP MGC204/GC-ECD
Aroclor 1268	11100-14-4	SW846 8082	AQ	Certified by SOP MGC204/GC-ECD

4.1
4

CHAIN OF CUSTODY

495 TECHNOLOGY CENTER WEST • BUILDING ONE

MARLBOROUGH, MA 01752

TEL: 508-481-6200 • FAX: 508-481-7753

ACCUTEST JOB #:

1181232

ACCUTEST QUOTE #:[illegible]

M81232: Chain of Custody

Page 1 of 1

Reasonable Confidence Protocol Laboratory Analysis QA/QC Certification Form

Laboratory Name: Accutest New England Client: Loureiro Eng. Associates

Project Location: UTC:2009 Quarterly GW-F&H Buildings Project Number: 88UT908

Sampling Date(s): 3/12/2009

Laboratory Sample ID(s): M81232-1, M81232-2, M81232-3, M81232-4, M81232-5, M81232-6, M81232-7, M81232-8

Methods: CT-ETPH, SW846 6010B, SW846 7470A, SW846 8082, SW846 8260B

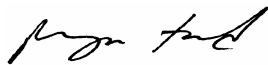
1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CTDEP method-specific Reasonable Confidence Protocol documents)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1A	Where all the method specified preservation and holding time requirements met?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1B	VPH and EPH methods only: Was the VPH or EPH method conducted without significant modifications (See section 11.3 of respective methods)	Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input checked="" type="checkbox"/>
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
3	Were samples received at an appropriate temperature (<6° C)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
4	Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
5	a) Were reporting limits specified or referenced on the chain-of-custody?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
	b) Were these reporting limits met?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Note: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence".

I, the undersigned, attest under pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized

Signature:



Position: Lab Director

Printed Name: Reza Tand

Accutest New England

Date: 3/25/2009

Internal Sample Tracking Chronicle

Loureiro Eng. Associates

Job No: M81232

UTC:2009 Quarterly GW-F&H Buildings
Project No: 88UT908

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M81232-1 1117574	Collected: 12-MAR-09 09:35	By: BG	Received: 12-MAR-09	By: JB		
M81232-1	CT-ETPH	17-MAR-09 19:26	DG	13-MAR-09 AJ		BCTTPH
M81232-1	SW846 8082	18-MAR-09 13:07	SL	16-MAR-09 FC		P8082RCP
M81232-1	SW846 8260B	23-MAR-09 15:52	EL			V8260RCP
M81232-2 1117574UF	Collected: 12-MAR-09 09:35	By: BG	Received: 12-MAR-09	By: JB		
M81232-2	SW846 6010B	17-MAR-09 11:50	EAL	16-MAR-09 EAL		AG,AS,BA,CD,CR,CU,NI,PB,SE, ZN
M81232-2	SW846 7470A	17-MAR-09 13:11	CF	16-MAR-09 CF		HG
M81232-3 1117575	Collected: 12-MAR-09 11:50	By: BG	Received: 12-MAR-09	By: JB		
M81232-3	CT-ETPH	17-MAR-09 20:06	DG	13-MAR-09 AJ		BCTTPH
M81232-3	SW846 8082	18-MAR-09 13:45	SL	16-MAR-09 FC		P8082RCP
M81232-3	SW846 8260B	23-MAR-09 16:19	EL			V8260RCP
M81232-4 1117575UF	Collected: 12-MAR-09 11:50	By: BG	Received: 12-MAR-09	By: JB		
M81232-4	SW846 6010B	17-MAR-09 11:56	EAL	16-MAR-09 EAL		AG,AS,BA,CD,CR,CU,NI,PB,SE, ZN
M81232-4	SW846 7470A	17-MAR-09 13:19	CF	16-MAR-09 CF		HG
M81232-5 1117576	Collected: 12-MAR-09 14:19	By: BG	Received: 12-MAR-09	By: JB		
M81232-5	CT-ETPH	17-MAR-09 20:45	DG	13-MAR-09 AJ		BCTTPH
M81232-5	SW846 8082	18-MAR-09 14:23	SL	16-MAR-09 FC		P8082RCP
M81232-5	SW846 8260B	23-MAR-09 16:46	EL			V8260RCP
M81232-6 1117576UF	Collected: 12-MAR-09 14:19	By: BG	Received: 12-MAR-09	By: JB		
M81232-6	SW846 6010B	17-MAR-09 12:02	EAL	16-MAR-09 EAL		AG,AS,BA,CD,CR,CU,NI,PB,SE, ZN

Internal Sample Tracking Chronicle

Loureiro Eng. Associates

Job No: M81232

UTC:2009 Quarterly GW-F&H Buildings
Project No: 88UT908

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M81232-6	SW846 7470A	17-MAR-09 13:21	CF	16-MAR-09	CF	HG
M81232-7 1117581	Collected: 12-MAR-09 14:19 By: BG		Received: 12-MAR-09 By: JB			
M81232-7	CT-ETPH	17-MAR-09 21:24	DG	13-MAR-09	AJ	BCTTPH
M81232-7	SW846 8082	18-MAR-09 15:00	SL	16-MAR-09	FC	P8082RCP
M81232-7	SW846 8260B	23-MAR-09 17:12	EL			V8260RCP
M81232-8 1117581UF	Collected: 12-MAR-09 14:19 By: BG		Received: 12-MAR-09 By: JB			
M81232-8	SW846 6010B	17-MAR-09 12:07	EAL	16-MAR-09	EAL	AG,AS,BA,CD,CR,CU,NI,PB,SE, ZN
M81232-8	SW846 7470A	17-MAR-09 13:23	CF	16-MAR-09	CF	HG



GC/MS Volatiles

5

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Page 1 of 3

Job Number: M81232

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG3594-MB	G88968.D	1	03/23/09	EL	n/a	n/a	MSG3594

The QC reported here applies to the following samples:

Method: SW846 8260B

M81232-1, M81232-3, M81232-5, M81232-7

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	

Method Blank Summary

Page 2 of 3

Job Number: M81232
Account: LEA Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG3594-MB	G88968.D	1	03/23/09	EL	n/a	n/a	MSG3594

The QC reported here applies to the following samples:

Method: SW846 8260B

M81232-1, M81232-3, M81232-5, M81232-7

CAS No.	Compound	Result	RL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

Method Blank Summary

Page 3 of 3

Job Number: M81232
Account: LEA Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG3594-MB	G88968.D	1	03/23/09	EL	n/a	n/a	MSG3594

The QC reported here applies to the following samples:

Method: SW846 8260B

M81232-1, M81232-3, M81232-5, M81232-7

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	104% 78-129%
2037-26-5	Toluene-D8	100% 80-120%
460-00-4	4-Bromofluorobenzene	107% 80-120%

Method Blank Summary

Page 1 of 3

Job Number: M81232

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG3594-MB1	G88988.D	1	03/24/09	EL	n/a	n/a	MSG3594

The QC reported here applies to the following samples:

Method: SW846 8260B

M81256-6MS, M81256-6MSD

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	

Method Blank Summary

Page 2 of 3

Job Number: M81232

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG3594-MB1	G88988.D	1	03/24/09	EL	n/a	n/a	MSG3594

The QC reported here applies to the following samples:

Method: SW846 8260B

M81256-6MS, M81256-6MSD

CAS No.	Compound	Result	RL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

Method Blank Summary

Job Number: M81232
Account: LEA Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG3594-MB1	G88988.D	1	03/24/09	EL	n/a	n/a	MSG3594

The QC reported here applies to the following samples: Method: SW846 8260B

M81256-6MS, M81256-6MSD

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	102% 78-129%
2037-26-5	Toluene-D8	99% 80-120%
460-00-4	4-Bromofluorobenzene	111% 80-120%

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 3

Job Number: M81232

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG3594-BS	G88965.D	1	03/23/09	EL	n/a	n/a	MSG3594
MSG3594-BSD	G88966.D	1	03/23/09	EL	n/a	n/a	MSG3594

The QC reported here applies to the following samples:

Method: SW846 8260B

M81232-1, M81232-3, M81232-5, M81232-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	50	54.6	109	49.7	99	9	30-150/25
107-13-1	Acrylonitrile	250	261	104	263	105	1	60-145/25
71-43-2	Benzene	50	49.0	98	49.3	99	1	78-120/25
108-86-1	Bromobenzene	50	49.9	100	49.6	99	1	76-120/25
75-27-4	Bromodichloromethane	50	55.9	112	56.1	112	0	70-137/25
75-25-2	Bromoform	50	50.3	101	51.2	102	2	66-136/25
74-83-9	Bromomethane	50	47.4	95	48.7	97	3	50-143/25
78-93-3	2-Butanone (MEK)	50	52.6	105	50.8	102	3	53-150/25
104-51-8	n-Butylbenzene	50	51.5	103	52.3	105	2	70-141/25
135-98-8	sec-Butylbenzene	50	49.8	100	50.2	100	1	74-130/25
98-06-6	tert-Butylbenzene	50	49.0	98	49.2	98	0	73-134/25
75-15-0	Carbon disulfide	50	52.0	104	52.7	105	1	56-147/25
56-23-5	Carbon tetrachloride	50	51.8	104	52.5	105	1	64-151/25
108-90-7	Chlorobenzene	50	47.9	96	48.7	97	2	75-120/25
75-00-3	Chloroethane	50	48.5	97	48.9	98	1	50-160/25
67-66-3	Chloroform	50	50.0	100	50.6	101	1	73-130/25
74-87-3	Chloromethane	50	55.7	111	54.6	109	2	40-150/25
95-49-8	o-Chlorotoluene	50	48.5	97	48.5	97	0	75-125/25
106-43-4	p-Chlorotoluene	50	49.5	99	49.7	99	0	73-127/25
96-12-8	1,2-Dibromo-3-chloropropane	50	41.4	83	40.8	82	1	53-149/25
124-48-1	Dibromochloromethane	50	53.5	107	54.5	109	2	77-130/25
106-93-4	1,2-Dibromoethane	50	49.0	98	50.0	100	2	70-134/25
95-50-1	1,2-Dichlorobenzene	50	50.4	101	50.8	102	1	76-122/25
541-73-1	1,3-Dichlorobenzene	50	49.8	100	51.2	102	3	73-124/25
106-46-7	1,4-Dichlorobenzene	50	48.7	97	49.2	98	1	73-123/25
75-71-8	Dichlorodifluoromethane	50	58.9	118	59.2	118	1	10-150/25
75-34-3	1,1-Dichloroethane	50	50.0	100	50.2	100	0	71-130/25
107-06-2	1,2-Dichloroethane	50	53.5	107	53.7	107	0	63-145/25
75-35-4	1,1-Dichloroethene	50	48.7	97	48.6	97	0	70-128/25
156-59-2	cis-1,2-Dichloroethene	50	48.9	98	49.2	98	1	70-123/25
156-60-5	trans-1,2-Dichloroethene	50	50.2	100	50.8	102	1	70-126/25
78-87-5	1,2-Dichloropropane	50	51.0	102	51.2	102	0	76-124/25
142-28-9	1,3-Dichloropropane	50	49.5	99	49.7	99	0	79-123/25
594-20-7	2,2-Dichloropropane	50	53.3	107	53.9	108	1	30-150/25
563-58-6	1,1-Dichloropropene	50	50.1	100	50.7	101	1	76-128/25
10061-01-5	cis-1,3-Dichloropropene	50	52.0	104	52.1	104	0	70-138/25

Blank Spike/Blank Spike Duplicate Summary

Page 2 of 3

Job Number: M81232
Account: LEA Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG3594-BS	G88965.D	1	03/23/09	EL	n/a	n/a	MSG3594
MSG3594-BSD	G88966.D	1	03/23/09	EL	n/a	n/a	MSG3594

The QC reported here applies to the following samples:

Method: SW846 8260B

M81232-1, M81232-3, M81232-5, M81232-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	50	52.7	105	53.2	106	1	61-140/25
100-41-4	Ethylbenzene	50	48.7	97	49.8	100	2	79-123/25
76-13-1	Freon 113	50	52.3	105	52.3	105	0	66-141/25
87-68-3	Hexachlorobutadiene	50	46.9	94	47.5	95	1	60-148/25
591-78-6	2-Hexanone	50	52.2	104	49.1	98	6	52-146/25
98-82-8	Isopropylbenzene	50	50.0	100	49.7	99	1	75-128/25
99-87-6	p-Isopropyltoluene	50	50.6	101	50.7	101	0	73-130/25
1634-04-4	Methyl Tert Butyl Ether	50	51.4	103	51.9	104	1	70-130/25
108-10-1	4-Methyl-2-pentanone (MIBK)	50	53.8	108	53.1	106	1	60-145/25
74-95-3	Methylene bromide	50	50.9	102	50.9	102	0	76-127/25
75-09-2	Methylene chloride	50	53.6	107	53.8	108	0	70-130/25
91-20-3	Naphthalene	50	44.7	89	44.2	88	1	62-140/25
103-65-1	n-Propylbenzene	50	50.8	102	50.8	102	0	73-130/25
100-42-5	Styrene	50	50.9	102	52.0	104	2	70-129/25
630-20-6	1,1,1,2-Tetrachloroethane	50	50.2	100	51.1	102	2	81-126/25
79-34-5	1,1,2,2-Tetrachloroethane	50	45.8	92	46.0	92	0	63-142/25
127-18-4	Tetrachloroethene	50	48.2	96	48.4	97	0	70-130/25
109-99-9	Tetrahydrofuran	50	49.5	99	49.7	99	0	50-147/25
108-88-3	Toluene	50	49.8	100	50.2	100	1	77-121/25
110-57-6	Trans-1,4-Dichloro-2-Butene	50	39.6	79	40.0	80	1	30-150/25
87-61-6	1,2,3-Trichlorobenzene	50	40.9	82	40.7	81	0	70-130/25
120-82-1	1,2,4-Trichlorobenzene	50	45.2	90	45.1	90	0	64-136/25
71-55-6	1,1,1-Trichloroethane	50	50.6	101	50.8	102	0	70-142/25
79-00-5	1,1,2-Trichloroethane	50	50.8	102	51.0	102	0	79-123/25
79-01-6	Trichloroethene	50	50.3	101	50.5	101	0	72-128/25
75-69-4	Trichlorofluoromethane	50	47.0	94	47.2	94	0	54-151/25
96-18-4	1,2,3-Trichloropropane	50	46.8	94	47.0	94	0	70-130/25
95-63-6	1,2,4-Trimethylbenzene	50	51.9	104	52.4	105	1	73-130/25
108-67-8	1,3,5-Trimethylbenzene	50	50.5	101	50.8	102	1	73-130/25
75-01-4	Vinyl chloride	50	59.7	119	60.5	121	1	45-150/25
	m,p-Xylene	100	98.6	99	100	100	1	74-127/25
95-47-6	o-Xylene	50	49.6	99	50.5	101	2	79-125/25

Blank Spike/Blank Spike Duplicate Summary

Page 3 of 3

Job Number: M81232

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG3594-BS	G88965.D	1	03/23/09	EL	n/a	n/a	MSG3594
MSG3594-BSD	G88966.D	1	03/23/09	EL	n/a	n/a	MSG3594

The QC reported here applies to the following samples:

Method: SW846 8260B

M81232-1, M81232-3, M81232-5, M81232-7

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	103%	104%	79-130%
2037-26-5	Toluene-D8	101%	101%	80-120%
460-00-4	4-Bromofluorobenzene	98%	97%	80-120%

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: M81232**Account:** LEA Loureiro Eng. Associates**Project:** UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M81256-6MS	G88994.D	1	03/24/09	EL	n/a	n/a	MSG3594
M81256-6MSD	G88995.D	1	03/24/09	EL	n/a	n/a	MSG3594
M81256-6	G88969.D	1	03/23/09	EL	n/a	n/a	MSG3594

The QC reported here applies to the following samples:**Method:** SW846 8260B

M81232-1, M81232-3, M81232-5, M81232-7

CAS No.	Compound	M81256-6 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	50	32.8	66	32.3	65	2	50-150/30
107-13-1	Acrylonitrile	ND	250	290	116	291	116	0	60-140/30
71-43-2	Benzene	ND	50	48.3	97	48.1	96	0	70-130/30
108-86-1	Bromobenzene	ND	50	48.5	97	49.2	98	1	73-122/30
75-27-4	Bromodichloromethane	ND	50	54.3	109	53.6	107	1	73-130/30
75-25-2	Bromoform	ND	50	47.3	95	47.7	95	1	50-131/30
74-83-9	Bromomethane	ND	50	47.2	94	45.4	91	4	50-148/30
78-93-3	2-Butanone (MEK)	ND	50	40.6	81	39.7	79	2	50-144/30
104-51-8	n-Butylbenzene	ND	50	46.5	93	47.8	96	3	70-130/30
135-98-8	sec-Butylbenzene	ND	50	47.2	94	48.7	97	3	70-130/30
98-06-6	tert-Butylbenzene	ND	50	47.6	95	48.6	97	2	70-130/30
75-15-0	Carbon disulfide	ND	50	44.1	88	41.9	84	5	50-147/30
56-23-5	Carbon tetrachloride	ND	50	51.3	103	51.3	103	0	62-148/30
108-90-7	Chlorobenzene	ND	50	47.7	95	47.6	95	0	74-126/30
75-00-3	Chloroethane	ND	50	50.6	101	48.2	96	5	55-150/30
67-66-3	Chloroform	ND	50	50.7	101	49.3	99	3	70-130/30
74-87-3	Chloromethane	ND	50	61.5	123	56.9	114	8	50-150/30
95-49-8	o-Chlorotoluene	ND	50	47.0	94	47.8	96	2	70-141/30
106-43-4	p-Chlorotoluene	ND	50	47.8	96	48.2	96	1	71-130/30
96-12-8	1,2-Dibromo-3-chloropropane	ND	50	45.6	91	46.0	92	1	50-139/30
124-48-1	Dibromochloromethane	ND	50	50.8	102	51.3	103	1	70-130/30
106-93-4	1,2-Dibromoethane	ND	50	49.6	99	50.2	100	1	74-126/30
95-50-1	1,2-Dichlorobenzene	ND	50	48.3	97	48.9	98	1	77-123/30
541-73-1	1,3-Dichlorobenzene	ND	50	48.6	97	49.2	98	1	76-124/30
106-46-7	1,4-Dichlorobenzene	ND	50	47.1	94	47.8	96	1	72-124/30
75-71-8	Dichlorodifluoromethane	ND	50	61.7	123	57.8	116	7	10-150/30
75-34-3	1,1-Dichloroethane	ND	50	51.6	103	50.0	100	3	64-142/30
107-06-2	1,2-Dichloroethane	ND	50	54.7	109	53.2	106	3	70-140/30
75-35-4	1,1-Dichloroethene	ND	50	49.2	98	48.0	96	2	62-144/30
156-59-2	cis-1,2-Dichloroethene	ND	50	48.5	97	47.4	95	2	70-138/30
156-60-5	trans-1,2-Dichloroethene	ND	50	50.3	101	50.0	100	1	70-130/30
78-87-5	1,2-Dichloropropane	ND	50	50.9	102	50.6	101	1	73-130/30
142-28-9	1,3-Dichloropropane	ND	50	49.3	99	49.9	100	1	75-123/30
594-20-7	2,2-Dichloropropane	ND	50	43.9	88	42.3	85	4	50-150/30
563-58-6	1,1-Dichloropropene	ND	50	50.3	101	50.2	100	0	71-130/30
10061-01-5	cis-1,3-Dichloropropene	ND	50	46.1	92	46.8	94	2	70-128/30

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: M81232
Account: LEA Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M81256-6MS	G88994.D	1	03/24/09	EL	n/a	n/a	MSG3594
M81256-6MSD	G88995.D	1	03/24/09	EL	n/a	n/a	MSG3594
M81256-6	G88969.D	1	03/23/09	EL	n/a	n/a	MSG3594

The QC reported here applies to the following samples:

Method: SW846 8260B

M81232-1, M81232-3, M81232-5, M81232-7

CAS No.	Compound	M81256-6 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	ND	50	47.0	94	47.7	95	1	70-124/30
100-41-4	Ethylbenzene	ND	50	48.3	97	48.6	97	1	70-130/30
76-13-1	Freon 113	ND	50	52.7	105	51.2	102	3	60-150/30
87-68-3	Hexachlorobutadiene	ND	50	43.2	86	44.3	89	3	60-127/30
591-78-6	2-Hexanone	ND	50	42.8	86	43.1	86	1	25-147/30
98-82-8	Isopropylbenzene	ND	50	48.5	97	49.9	100	3	70-130/30
99-87-6	p-Isopropyltoluene	ND	50	47.2	94	48.4	97	3	70-130/30
1634-04-4	Methyl Tert Butyl Ether	ND	50	51.3	103	50.4	101	2	61-143/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	50	59.5	119	59.2	118	1	60-144/30
74-95-3	Methylene bromide	ND	50	51.1	102	50.2	100	2	75-129/30
75-09-2	Methylene chloride	ND	50	52.4	105	50.8	102	3	70-143/30
91-20-3	Naphthalene	ND	50	35.0	70	41.2	82	16	50-138/30
103-65-1	n-Propylbenzene	ND	50	49.1	98	50.0	100	2	70-138/30
100-42-5	Styrene	ND	50	46.1	92	47.7	95	3	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND	50	49.0	98	49.2	98	0	72-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND	50	48.6	97	50.6	101	4	70-130/30
127-18-4	Tetrachloroethene	56.0	50	94.2	76	94.1	76	0	70-130/30
109-99-9	Tetrahydrofuran	ND	50	58.6	117	57.6	115	2	50-150/30
108-88-3	Toluene	ND	50	48.9	98	48.8	98	0	70-130/30
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	50	23.5	47	26.1	52	10	40-150/30
87-61-6	1,2,3-Trichlorobenzene	ND	50	33.5	67	36.3	73	8	53-128/30
120-82-1	1,2,4-Trichlorobenzene	ND	50	37.2	74	39.8	80	7	60-125/30
71-55-6	1,1,1-Trichloroethane	ND	50	51.4	103	50.2	100	2	70-148/30
79-00-5	1,1,2-Trichloroethane	ND	50	50.7	101	50.5	101	0	76-126/30
79-01-6	Trichloroethene	ND	50	50.7	101	49.9	100	2	70-130/30
75-69-4	Trichlorofluoromethane	ND	50	48.6	97	47.1	94	3	53-150/30
96-18-4	1,2,3-Trichloropropane	ND	50	42.8	86	45.5	91	6	61-129/30
95-63-6	1,2,4-Trimethylbenzene	ND	50	48.5	97	50.1	100	3	60-144/30
108-67-8	1,3,5-Trimethylbenzene	ND	50	47.6	95	49.1	98	3	64-137/30
75-01-4	Vinyl chloride	ND	50	63.8	128	59.9	120	6	50-150/30
	m,p-Xylene	ND	100	96.5	97	97.9	98	1	70-130/30
95-47-6	o-Xylene	ND	50	48.0	96	48.3	97	1	70-130/30

Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: M81232

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M81256-6MS	G88994.D	1	03/24/09	EL	n/a	n/a	MSG3594
M81256-6MSD	G88995.D	1	03/24/09	EL	n/a	n/a	MSG3594
M81256-6	G88969.D	1	03/23/09	EL	n/a	n/a	MSG3594

The QC reported here applies to the following samples:

Method: SW846 8260B

M81232-1, M81232-3, M81232-5, M81232-7

CAS No.	Surrogate Recoveries	MS	MSD	M81256-6	Limits
1868-53-7	Dibromofluoromethane	104%	102%	104%	78-129%
2037-26-5	Toluene-D8	100%	101%	99%	80-120%
460-00-4	4-Bromofluorobenzene	97%	99%	110%	80-120%

Volatile Internal Standard Area Summary

Page 1 of 1

Job Number: M81232
Account: LEA Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

Check Std: MSG3594-CC3531 **Injection Date:** 03/23/09
Lab File ID: G88964.D **Injection Time:** 10:58
Instrument ID: GCMSG **Method:** SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	198058	9.05	295970	9.91	168063	13.17	137624	15.73	70276	6.65
Upper Limit ^a	396116	9.55	591940	10.41	336126	13.67	275248	16.23	140552	7.15
Lower Limit ^b	99029	8.55	147985	9.41	84032	12.67	68812	15.23	35138	6.15

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSG3594-BS	197931	9.05	290966	9.92	160095	13.17	130442	15.73	70615	6.65
MSG3594-BSD	194314	9.05	284984	9.92	156229	13.17	130148	15.73	68005	6.65
MSG3594-MB	190912	9.05	281366	9.92	147084	13.17	105588	15.73	65061	6.66
M81256-6	188955	9.05	279621	9.92	142323	13.17	95200	15.74	53934	6.67
ZZZZZZ	191277	9.05	285285	9.92	144161	13.17	92412	15.73	57894	6.66
ZZZZZZ	181992	9.05	269373	9.92	136137	13.17	85213	15.73	61831	6.68
ZZZZZZ	178677	9.05	262711	9.92	133319	13.17	85500	15.73	62868	6.67
ZZZZZZ	171972	9.05	252933	9.92	127508	13.17	79043	15.73	59810	6.67
ZZZZZZ	174304	9.05	255675	9.92	127241	13.17	80364	15.74	59788	6.66
M81232-1	166449	9.05	247085	9.92	125773	13.17	79322	15.73	58748	6.67
M81232-3	169979	9.05	250125	9.92	126852	13.17	77691	15.74	60737	6.67
M81232-5	169544	9.05	248894	9.92	127537	13.17	83631	15.73	65072	6.67
M81232-7	169659	9.05	249908	9.92	128016	13.17	83063	15.73	63089	6.67
ZZZZZZ	166655	9.05	246381	9.92	124229	13.17	85987	15.73	64144	6.67
ZZZZZZ	170905	9.05	252952	9.92	132743	13.17	105614	15.73	63119	6.66
ZZZZZZ	172496	9.05	255119	9.92	132806	13.17	106636	15.73	71763	6.66

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.

(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Page 1 of 1

Job Number: M81232
Account: LEA Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

Check Std: MSG3595-CC3531 **Injection Date:** 03/24/09
Lab File ID: G88984.D **Injection Time:** 09:48
Instrument ID: GCMSG **Method:** SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	182697	9.05	274694	9.91	155822	13.17	128945	15.73	61716	6.64
Upper Limit ^a	365394	9.55	549388	10.41	311644	13.67	257890	16.23	123432	7.14
Lower Limit ^b	91349	8.55	137347	9.41	77911	12.67	64473	15.23	30858	6.14

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSG3595-BS	188592	9.05	281576	9.92	151978	13.17	121702	15.73	59695	6.66
MSG3594-BS1	188592	9.05	281576	9.92	151978	13.17	121702	15.73	59695	6.66
MSG3595-BSD	193234	9.05	282054	9.92	153915	13.17	124642	15.73	65949	6.66
MSG3594-BSD1	193234	9.05	282054	9.92	153915	13.17	124642	15.73	65949	6.66
MSG3594-MB1	185871	9.05	272074	9.92	136044	13.17	90124	15.74	61554	6.67
MSG3595-MB	185871	9.05	272074	9.92	136044	13.17	90124	15.74	61554	6.67
ZZZZZZ	180534	9.05	267170	9.92	137068	13.17	91186	15.73	62841	6.67
ZZZZZZ	173934	9.05	253916	9.92	128507	13.17	83238	15.73	61333	6.66
ZZZZZZ	172678	9.05	251456	9.92	125328	13.17	82127	15.73	62986	6.67
M81264-4	173052	9.05	251371	9.92	125448	13.17	79048	15.73	67622	6.67
ZZZZZZ	175601	9.05	261307	9.92	131109	13.17	86965	15.74	65788	6.66
M81256-6MS	170101	9.05	254578	9.92	139138	13.17	113765	15.73	67372	6.65
M81256-6MSD	178913	9.05	261929	9.92	141243	13.17	111541	15.73	69832	6.65
ZZZZZZ	175757	9.05	260357	9.92	133851	13.17	87505	15.73	63057	6.66
ZZZZZZ	181873	9.05	268178	9.92	134817	13.17	86115	15.73	63050	6.66
ZZZZZZ	173044	9.05	250731	9.92	126489	13.17	86862	15.74	58825	6.66
ZZZZZZ	174164	9.05	254529	9.92	128221	13.17	81885	15.74	64396	6.66
ZZZZZZ	172593	9.05	253528	9.92	127894	13.17	79882	15.73	66970	6.67
ZZZZZZ	168613	9.05	248069	9.92	123429	13.18	76026	15.73	61557	6.67
ZZZZZZ	170315	9.05	252039	9.92	126940	13.17	79766	15.74	56285	6.67
ZZZZZZ	165432	9.05	245134	9.92	121621	13.17	74813	15.73	57272	6.67
ZZZZZZ	168319	9.05	246440	9.92	123884	13.17	79531	15.73	53099	6.66
ZZZZZZ	168513	9.05	249482	9.92	124069	13.18	80427	15.74	57336	6.67
M81264-4MS	166231	9.05	246240	9.92	133044	13.17	107162	15.73	59206	6.65
M81264-4MSD	172349	9.05	253861	9.92	135386	13.17	107150	15.73	62550	6.65

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Page 1 of 1

Job Number: M81232

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Method: SW846 8260B

Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
M81232-1	G88975.D	105.0	100.0	115.0
M81232-3	G88976.D	103.0	100.0	116.0
M81232-5	G88977.D	104.0	100.0	112.0
M81232-7	G88978.D	104.0	100.0	113.0
M81256-6MS	G88994.D	104.0	100.0	97.0
M81256-6MSD	G88995.D	102.0	101.0	99.0
MSG3594-BS	G88965.D	103.0	101.0	98.0
MSG3594-BSD	G88966.D	104.0	101.0	97.0
MSG3594-MB	G88968.D	104.0	100.0	107.0
MSG3594-MB1	G88988.D	102.0	99.0	111.0

Surrogate Compounds

Recovery Limits

S1 = Dibromofluoromethane

78-129%

S2 = Toluene-D8

80-120%

S3 = 4-Bromofluorobenzene

80-120%

5.5.1

5



GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Page 1 of 1

Job Number: M81232

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP18064-MB	BC25800.D	1	03/16/09	DG	03/13/09	OP18064	GBC1421

The QC reported here applies to the following samples:

Method: CT-ETPH

M81232-1, M81232-3, M81232-5, M81232-7

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	ND	0.080	mg/l	

CAS No.	Surrogate Recoveries	Limits
3386-33-2	1-Chlorooctadecane	69% 50-149%

Method Blank Summary

Page 1 of 1

Job Number: M81232
Account: LEA Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP18075-MB	BB24427A.D 1		03/17/09	SL	03/16/09	OP18075	GBB1008

The QC reported here applies to the following samples:

Method: SW846 8082

M81232-1, M81232-3, M81232-5, M81232-7

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries	Limits	
877-09-8	Tetrachloro-m-xylene	123%	32-149%
877-09-8	Tetrachloro-m-xylene	107%	32-149%
2051-24-3	Decachlorobiphenyl	114%	30-150%
2051-24-3	Decachlorobiphenyl	111%	30-150%

Blank Spike Summary

Page 1 of 1

Job Number: M81232

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP18064-BS	BC25801C.D1		03/17/09	DG	03/13/09	OP18064	GBC1421

The QC reported here applies to the following samples:

Method: CT-ETPH

M81232-1, M81232-3, M81232-5, M81232-7

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	CT-DRO (C9-C36)	0.7	0.568	81	60-120

CAS No.	Surrogate Recoveries	BSP	Limits
3386-33-2	1-Chlorooctadecane	78%	50-149%

6.2.1

6

Blank Spike Summary

Page 1 of 1

Job Number: M81232

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP18075-BSP	BB24428A.D 1		03/17/09	SL	03/16/09	OP18075	GBB1008

The QC reported here applies to the following samples:

Method: SW846 8082

M81232-1, M81232-3, M81232-5, M81232-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
12674-11-2	Aroclor 1016	2	2.1	105	55-140
11104-28-2	Aroclor 1221		ND		40-140
11141-16-5	Aroclor 1232		ND		40-140
53469-21-9	Aroclor 1242		ND		40-140
12672-29-6	Aroclor 1248		ND		40-140
11097-69-1	Aroclor 1254		ND		40-140
11096-82-5	Aroclor 1260	2	2.4	120	61-140
37324-23-5	Aroclor 1262		ND		40-140
11100-14-4	Aroclor 1268		ND		40-140

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	123%	32-149%
877-09-8	Tetrachloro-m-xylene	107%	32-149%
2051-24-3	Decachlorobiphenyl	104%	30-150%
2051-24-3	Decachlorobiphenyl	113%	30-150%

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: M81232

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP18064-MS	BC25802.D	1	03/17/09	DG	03/13/09	OP18064	GBC1421
OP18064-MSD	BC25803.D	1	03/17/09	DG	03/13/09	OP18064	GBC1421
M81179-16	BC25804.D	1	03/17/09	DG	03/13/09	OP18064	GBC1421

The QC reported here applies to the following samples:

Method: CT-ETPH

M81232-1, M81232-3, M81232-5, M81232-7

CAS No.	Compound	M81179-16 mg/l	Spike Q	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	CT-DRO (C9-C36)	ND	0.7	0.600	86	0.562	80	7	50-129/26

CAS No.	Surrogate Recoveries	MS	MSD	M81179-16	Limits
3386-33-2	1-Chlorooctadecane	76%	75%	68%	50-149%

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: M81232

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP18075-MS	BB24429.D	1	03/17/09	SL	03/16/09	OP18075	GBB1008
OP18075-MSD	BB24430.D	1	03/17/09	SL	03/16/09	OP18075	GBB1008
M81296-5	BB24431.D	1	03/18/09	SL	03/16/09	OP18075	GBB1008

The QC reported here applies to the following samples:

Method: SW846 8082

M81232-1, M81232-3, M81232-5, M81232-7

CAS No.	Compound	M81296-5 ug/l	Spike Q	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND	2	2.1	105	2.1	105	0	53-140/36
11104-28-2	Aroclor 1221	ND		ND		ND		nc	40-140/50
11141-16-5	Aroclor 1232	ND		ND		ND		nc	40-140/50
53469-21-9	Aroclor 1242	ND		ND		ND		nc	40-140/50
12672-29-6	Aroclor 1248	ND		ND		ND		nc	40-140/50
11097-69-1	Aroclor 1254	ND		ND		ND		nc	40-140/50
11096-82-5	Aroclor 1260	ND	2	2.3	115	2.4	120	4	54-140/27
37324-23-5	Aroclor 1262	ND		ND		ND		nc	40-140/20
11100-14-4	Aroclor 1268	ND		ND		ND		nc	40-140/50

CAS No.	Surrogate Recoveries	MS	MSD	M81296-5	Limits
877-09-8	Tetrachloro-m-xylene	116%	116%	122%	32-149%
877-09-8	Tetrachloro-m-xylene	102%	103%	108%	32-149%
2051-24-3	Decachlorobiphenyl	108%	114%	99%	30-150%
2051-24-3	Decachlorobiphenyl	107%	108%	111%	30-150%

Semivolatile Surrogate Recovery Summary

Job Number: M81232
Account: LEA Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

Method: CT-ETPH	Matrix: AQ
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a
M81232-1	BC25817.D	80.0
M81232-3	BC25818.D	76.0
M81232-5	BC25819.D	83.0
M81232-7	BC25820.D	87.0
OP18064-BS	BC25801C.D	78.0
OP18064-MB	BC25800.D	69.0
OP18064-MS	BC25802.D	76.0
OP18064-MSD	BC25803.D	75.0

Surrogate Compounds	Recovery Limits
S1 = 1-Chlorooctadecane	50-149%

(a) Recovery from GC signal #1

Semivolatile Surrogate Recovery Summary

Page 1 of 1

Job Number: M81232

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Method: SW846 8082

Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S1 ^b	S2 ^a	S2 ^b
M81232-1	BB24438D.D	109.0	96.0	97.0	134.0
M81232-3	BB24438E.D	107.0	94.0	98.0	132.0
M81232-5	BB24439.D	105.0	91.0	99.0	128.0
M81232-7	BB24440.D	87.0	76.0	76.0	104.0
OP18075-BSP	BB24428A.D	123.0	107.0	104.0	113.0
OP18075-MB	BB24427A.D	123.0	107.0	114.0	111.0
OP18075-MS	BB24429.D	116.0	102.0	108.0	107.0
OP18075-MSD	BB24430.D	116.0	103.0	114.0	108.0

Surrogate Compounds

Recovery Limits

S1 = Tetrachloro-m-xylene

32-149%

S2 = Decachlorobiphenyl

30-150%

(a) Recovery from GC signal #1

(b) Recovery from GC signal #2

6.4.2

6



Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M81232
Account: LEA - Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

QC Batch ID: MP13206
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 03/16/09

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	14	31		
Antimony	6.0	2.9	3		
Arsenic	10	2.7	3.2	-1.8	<10
Barium	200	.64	1.2	0.52	<200
Beryllium	4.0	.17	.3		
Boron	100	2.3	4.8		
Cadmium	4.0	.24	.3	-0.080	<4.0
Calcium	5000	4.7	40		
Chromium	10	.51	1.4	0.16	<10
Cobalt	50	.76	1		
Copper	25	1.1	1.8	-1.5	<25
Iron	100	11	29		
Lead	5.0	1.3	1.8	-1.3	<5.0
Magnesium	5000	8	10		
Manganese	15	.17	1.3		
Molybdenum	100	.5	1.4		
Nickel	40	.65	1	0.39	<40
Potassium	5000	25	31		
Selenium	10	1.6	3.3	1.5	<10
Silver	5.0	.64	.7	0.080	<5.0
Sodium	5000	99	210		
Strontium	10	.12	.3		
Thallium	10	2	4.5		
Tin	100	1.6	9.9		
Titanium	50	4.1	5.1		
Tungsten	100	5.4	7		
Vanadium	30	.65	3.5		
Zinc	20	1.1	1.3	1.4	<20

Associated samples MP13206: M81232-2, M81232-4, M81232-6, M81232-8

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M81232
 Account: LEA - Loureiro Eng. Associates
 Project: UTC:2009 Quarterly GW-F&H Buildings

QC Batch ID: MP13206
 Matrix Type: AQUEOUS

Methods: SW846 6010B
 Units: ug/l

Prep Date: 03/16/09 03/16/09

Metal	M81231-4 Original MS		Spikelot MPICP	% Rec	QC Limits	M81231-4 Original DUP		RPD	QC Limits
Aluminum									
Antimony									
Arsenic	0.0	532	500	106.4	75-125	0.0	0.0	NC	0-20
Barium	129	2130	2000	100.1	75-125	129	129	0.0	0-20
Beryllium									
Boron									
Cadmium	0.0	517	500	103.4	75-125	0.0	0.0	NC	0-20
Calcium									
Chromium	13.7	528	500	102.9	75-125	13.7	13.4	2.2	0-20
Cobalt									
Copper	8.4	539	500	106.1	75-125	8.4	8.5	1.2	0-20
Iron									
Lead	0.0	1030	1000	103.0	75-125	0.0	0.0	NC	0-20
Magnesium									
Manganese									
Molybdenum									
Nickel	3.1	507	500	100.8	75-125	3.1	3.3	6.2	0-20
Potassium									
Selenium	0.0	533	500	106.6	75-125	0.0	3.0	200.0(a)	0-20
Silver	0.0	203	200	101.5	75-125	0.0	0.0	NC	0-20
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Tungsten									
Vanadium									
Zinc	4.8	523	500	103.6	75-125	4.8	4.8	0.0	0-20

Associated samples MP13206: M81232-2, M81232-4, M81232-6, M81232-8

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) RPD acceptable due to low duplicate and sample concentrations.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M81232
 Account: LEA - Loureiro Eng. Associates
 Project: UTC:2009 Quarterly GW-F&H Buildings

QC Batch ID: MP13206
 Matrix Type: AQUEOUS

Methods: SW846 6010B
 Units: ug/l

Prep Date: 03/16/09

03/16/09

Metal	BSP Result	Spikelot MPICP	% Rec	QC Limits	BSD Result	Spikelot MPICP	% Rec	BSD RPD	QC Limit
Aluminum									
Antimony									
Arsenic	510	500	102.0	80-120	521	500	104.2	2.1	20
Barium	1950	2000	97.5	80-120	1970	2000	98.5	1.0	20
Beryllium									
Boron									
Cadmium	506	500	101.2	80-120	518	500	103.6	2.3	20
Calcium									
Chromium	505	500	101.0	80-120	512	500	102.4	1.4	20
Cobalt									
Copper	508	500	101.6	80-120	517	500	103.4	1.8	20
Iron									
Lead	1000	1000	100.0	80-120	1020	1000	102.0	2.0	20
Magnesium									
Manganese									
Molybdenum									
Nickel	493	500	98.6	80-120	502	500	100.4	1.8	20
Potassium									
Selenium	520	500	104.0	80-120	526	500	105.2	1.1	20
Silver	198	200	99.0	80-120	200	200	100.0	1.0	20
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Tungsten									
Vanadium									
Zinc	507	500	101.4	80-120	521	500	104.2	2.7	20

Associated samples MP13206: M81232-2, M81232-4, M81232-6, M81232-8

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: M81232
 Account: LEA - Loureiro Eng. Associates
 Project: UTC:2009 Quarterly GW-F&H Buildings

QC Batch ID: MP13206
 Matrix Type: AQUEOUS

Methods: SW846 6010B
 Units: ug/l

Prep Date: 03/16/09

Metal	M81231-4 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic	0.00	0.00	NC	0-10
Barium	129	130	0.9	0-10
Beryllium				
Boron				
Cadmium	0.00	0.00	NC	0-10
Calcium				
Chromium	13.7	11.4	16.8 (a)	0-10
Cobalt				
Copper	8.35	0.00	100.0(a)	0-10
Iron				
Lead	0.00	0.00	NC	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel	3.06	0.00	100.0(a)	0-10
Potassium				
Selenium	0.00	0.00	NC	0-10
Silver	0.00	0.00	NC	0-10
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium				
Zinc	4.79	0.00	100.0(a)	0-10

Associated samples MP13206: M81232-2, M81232-4, M81232-6, M81232-8

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M81232
Account: LEA - Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

QC Batch ID: MP13208
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 03/16/09

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.035	.048	-0.076	<0.20

Associated samples MP13208: M81232-2, M81232-4, M81232-6, M81232-8

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

7.2.1

7

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M81232
 Account: LEA - Loureiro Eng. Associates
 Project: UTC:2009 Quarterly GW-F&H Buildings

QC Batch ID: MP13208
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 03/16/09 03/16/09

Metal	M81231-4 Original MS		Spikelot HGRWS1 % Rec		QC Limits	M81231-4 Original DUP		RPD	QC Limits
Mercury	0.0	3.0	3	100.0	75-125	0.0	0.0	NC	0-20

Associated samples MP13208: M81232-2, M81232-4, M81232-6, M81232-8

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

7.2.2

7

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M81232
 Account: LEA - Loureiro Eng. Associates
 Project: UTC:2009 Quarterly GW-F&H Buildings

QC Batch ID: MP13208
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 03/16/09 03/16/09

Metal	BSP Result	Spikelot HGRWS1	% Rec	QC Limits	BSD Result	Spikelot HGRWS1	% Rec	BSD RPD	QC Limit
Mercury	3.1	3	103.3	80-120	3.2	3	106.7	3.2	20

Associated samples MP13208: M81232-2, M81232-4, M81232-6, M81232-8

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested



07/02/09

IT'S ALL IN THE CHEMISTRY

07/02/09

Technical Report for

Loureiro Eng. Associates

UTC:2009 Quarterly GW-F&H Buildings

88UT908

Accutest Job Number: M83766

Sampling Date: 06/18/09

Report to:

LEA

nsemmons@loureiro.com

ATTN: Nate Emmons

Total number of pages in report: **110**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.


Reza Fand
Lab Director

Client Service contact: Kristen Blanchard 508-481-6200

Certifications: MA (M-MA136) CT (PH-0109) NH (2502) RI (00071) ME (MA0136) FL (E87579)
NY (11791) NJ (MA926) PA (68-01121) NC (653) IL (200018) NAVY USACE

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Test results relate only to samples analyzed.

Table of Contents

-1-

Section 1: Sample Summary	3
Section 2: Case Narrative/Conformance Summary	5
Section 3: Sample Results	7
3.1: M83766-1: 1122876	8
3.2: M83766-2: 1122876UF	13
3.3: M83766-3: 1122877	14
3.4: M83766-4: 1122877UF	19
3.5: M83766-5: 1122878	20
3.6: M83766-6: 1122878UF	25
3.7: M83766-7: 1122881	26
3.8: M83766-8: 1122881UF	31
3.9: M83766-9: 1122882	32
3.10: M83766-10: 1122880UF	35
3.11: M83766-11: 1122873	36
3.12: M83766-12: 1122873UF	41
3.13: M83766-13: 1122874	42
3.14: M83766-14: 1122874UF	47
3.15: M83766-15: 1122875	48
3.16: M83766-16: 1122875UF	53
3.17: M83766-17: 1122880	54
Section 4: Misc. Forms	59
4.1: Certification Exceptions	60
4.2: Chain of Custody	61
4.3: RCP Form	64
4.4: Sample Tracking Chronicle	65
Section 5: GC/MS Volatiles - QC Data Summaries	68
5.1: Method Blank Summary	69
5.2: Blank Spike Summary	75
5.3: Blank Spike/Blank Spike Duplicate Summary	78
5.4: Matrix Spike/Matrix Spike Duplicate Summary	81
5.5: Internal Standard Area Summaries	87
5.6: Surrogate Recovery Summaries	89
Section 6: GC Semi-volatiles - QC Data Summaries	90
6.1: Method Blank Summary	91
6.2: Blank Spike Summary	93
6.3: Matrix Spike/Matrix Spike Duplicate Summary	95
6.4: Surrogate Recovery Summaries	97
Section 7: Metals Analysis - QC Data Summaries	99
7.1: Prep QC MP13688: As,Ba,Cd,Cr,Cu,Pb,Ni,Se,Ag,Zn	100
7.2: Prep QC MP13693: Hg	108

Sample Summary

Loureiro Eng. Associates

Job No: M83766

UTC:2009 Quarterly GW-F&H Buildings

Project No: 88UT908

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
M83766-1	06/18/09	09:40 NE	06/18/09	AQ	Ground Water	1122876
M83766-2	06/18/09	09:40 NE	06/18/09	AQ	Ground Water	1122876UF
M83766-3	06/18/09	12:00 NE	06/18/09	AQ	Ground Water	1122877
M83766-4	06/18/09	12:00 NE	06/18/09	AQ	Ground Water	1122877UF
M83766-5	06/18/09	13:55 NE	06/18/09	AQ	Ground Water	1122878
M83766-6	06/18/09	13:55 NE	06/18/09	AQ	Ground Water	1122878UF
M83766-7	06/18/09	14:05 NE	06/18/09	AQ	Ground Water	1122881
M83766-8	06/18/09	14:05 NE	06/18/09	AQ	Ground Water	1122881UF
M83766-9	06/18/09	08:30 NE	06/18/09	AQ	Ground Water	1122882
M83766-10	06/18/09	13:30 SB	06/18/09	AQ	Ground Water	1122880UF
M83766-11	06/18/09	09:30 CSB	06/18/09	AQ	Ground Water	1122873
M83766-12	06/18/09	09:30 CSB	06/18/09	AQ	Ground Water	1122873UF
M83766-13	06/18/09	11:10 CSB	06/18/09	AQ	Ground Water	1122874



Sample Summary
(continued)

Loureiro Eng. Associates

Job No: M83766

UTC:2009 Quarterly GW-F&H Buildings
Project No: 88UT908

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
M83766-14	06/18/09	11:10	CSB	06/18/09	AQ Ground Water	1122874UF
M83766-15	06/18/09	13:30	CSB	06/18/09	AQ Ground Water	1122875
M83766-16	06/18/09	13:30	CSB	06/18/09	AQ Ground Water	1122875UF
M83766-17	06/18/09	13:30	CSB	06/18/09	AQ Ground Water	1122880

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Loureiro Eng. Associates

Job No M83766

Site: UTC:2009 Quarterly GW-F&H Buildings

Report Date 7/2/2009 3:28:09 PM

17 Sample(s) were collected on 06/18/2009 and were received at Accutest on 06/18/2009 properly preserved, at 2.5 Deg. C and intact. These Samples received an Accutest job number of M83766. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix AQ	Batch ID: MSG3684
------------------	--------------------------

- All samples were analyzed within the recommended method holding time.
- Sample(s) M83761-7MS, M83761-7MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for Chloromethane, Dichlorodifluoromethane are outside control limits. Blank Spike meets program technical requirements.
- MS/MSD Recovery(s) for Vinyl chloride are outside control limits. Outside control limits due to possible matrix interference. Refer to Blank Spike.
- Initial calibration standard (batch MSG3682) for benzene, chloromethane is employed quadratic regression. Initial calibration verification standard (MSG3628-ICV3628) for dichlorodifluoromethane exceed 35% Difference.
- M83761-7MS/M83761-7MSD for Dichlorodifluoromethane: Outside control limits. Blank Spike meets program technical requirements.
- Continuing calibration check standard for 2,2-Dichloropropane exceed 30% Difference. This check standard met RCP criteria.

Matrix AQ	Batch ID: MSG3686
------------------	--------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M83755-7MS, M83755-7MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for Chloromethane, Vinyl chloride are outside control limits. Outside control limits due to possible matrix interference. Refer to Blank Spike.
- M83755-7MS/M83755-7MSD for Dichlorodifluoromethane: Outside control limits. Associated samples are non-detect for this compound.
- MSG3686-BS/MSG3686-BSD for Dichlorodifluoromethane: Outside control limits. Associated samples are non-detect for this compound.

Extractables by GC By Method CT-ETPH 7/06

Matrix AQ	Batch ID: OP18815
------------------	--------------------------

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M83755-22MS, M83755-22MSD were used as the QC samples indicated.

Extractables by GC By Method SW846 8082

Matrix AQ

Batch ID: OP18816

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M84041-9MS, M84041-9MSD were used as the QC samples indicated.

Metals By Method SW846 6010B

Matrix AQ

Batch ID: MP13688

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M83766-2DUP, M83766-2MS, M83766-2SDL, M83766-2DUP were used as the QC samples for metals.
- RPD(s) for Duplicate for Cadmium, Nickel are outside control limits for sample MP13688-D1. RPD acceptable due to low duplicate and sample concentrations.
- RPD(s) for Serial Dilution for Nickel, Zinc are outside control limits for sample MP13688-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- Only selected metals requested.

Metals By Method SW846 7470A

Matrix AQ

Batch ID: MP13693

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M83572-4DUP, M83572-4MS were used as the QC samples for metals.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety. The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(M83766).



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Section 3

3

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	1122876		
Lab Sample ID:	M83766-1	Date Sampled:	06/18/09
Matrix:	AQ - Ground Water	Date Received:	06/18/09
Method:	SW846 8260B	Percent Solids:	n/a
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G91123.D	1	06/25/09	EL	n/a	n/a	MSG3684
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1122876	Date Sampled:	06/18/09
Lab Sample ID:	M83766-1	Date Received:	06/18/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	17.3	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	1.9	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	1.0	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1122876	Date Sampled:	06/18/09
Lab Sample ID:	M83766-1	Date Received:	06/18/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	102%		70-130%
460-00-4	4-Bromofluorobenzene	100%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1122876**Lab Sample ID:** M83766-1**Date Sampled:** 06/18/09**Matrix:** AQ - Ground Water**Date Received:** 06/18/09**Method:** CT-ETPH 7/06 SW846 3510C**Percent Solids:** n/a**Project:** UTC:2009 Quarterly GW-F&H Buildings

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BC28232.D	1	06/29/09	WZ	06/25/09	OP18815	GBC1532
Run #2							

	Initial Volume	Final Volume
Run #1	800 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	0.525	0.10	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	97%		50-149%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1122876
Lab Sample ID: M83766-1
Matrix: AQ - Ground Water
Method: SW846 8082 SW846 3510C
Project: UTC:2009 Quarterly GW-F&H Buildings

Date Sampled: 06/18/09
Date Received: 06/18/09
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB26443.D	1	06/30/09	CZ	06/25/09	OP18816	GBB1084
Run #2							

	Initial Volume	Final Volume
Run #1	800 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.31	ug/l	
11104-28-2	Aroclor 1221	ND	0.31	ug/l	
11141-16-5	Aroclor 1232	ND	0.31	ug/l	
53469-21-9	Aroclor 1242	ND	0.31	ug/l	
12672-29-6	Aroclor 1248	ND	0.31	ug/l	
11097-69-1	Aroclor 1254	ND	0.31	ug/l	
11096-82-5	Aroclor 1260	ND	0.31	ug/l	
37324-23-5	Aroclor 1262	ND	0.31	ug/l	
11100-14-4	Aroclor 1268	ND	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	95%		30-150%
877-09-8	Tetrachloro-m-xylene	96%		30-150%
2051-24-3	Decachlorobiphenyl	114%		30-150%
2051-24-3	Decachlorobiphenyl	90%		30-150%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1122876UF**Lab Sample ID:** M83766-2**Matrix:** AQ - Ground Water**Date Sampled:** 06/18/09**Date Received:** 06/18/09**Percent Solids:** n/a**Project:** UTC:2009 Quarterly GW-F&H Buildings**Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Barium	< 200	200	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Cadmium	< 4.0	4.0	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Chromium	< 10	10	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Copper	< 25	25	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Lead	< 5.0	5.0	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	06/23/09	06/24/09 MA	SW846 7470A ¹	SW846 7470A ⁴
Nickel	< 40	40	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Selenium	< 10	10	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Silver	< 5.0	5.0	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Zinc	< 20	20	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³

(1) Instrument QC Batch: MA10613

(2) Instrument QC Batch: MA10626

(3) Prep QC Batch: MP13688

(4) Prep QC Batch: MP13693

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1122877		
Lab Sample ID:	M83766-3	Date Sampled:	06/18/09
Matrix:	AQ - Ground Water	Date Received:	06/18/09
Method:	SW846 8260B	Percent Solids:	n/a
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G91124.D	1	06/25/09	EL	n/a	n/a	MSG3684
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1122877	Date Sampled:	06/18/09
Lab Sample ID:	M83766-3	Date Received:	06/18/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1122877	Date Sampled:	06/18/09
Lab Sample ID:	M83766-3	Date Received:	06/18/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	101%		70-130%
460-00-4	4-Bromofluorobenzene	100%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1122877
Lab Sample ID: M83766-3
Matrix: AQ - Ground Water
Method: CT-ETPH 7/06 SW846 3510C
Project: UTC:2009 Quarterly GW-F&H Buildings

Date Sampled: 06/18/09
Date Received: 06/18/09
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BC28233.D	1	06/29/09	WZ	06/25/09	OP18815	GBC1532
Run #2							

	Initial Volume	Final Volume
Run #1	700 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	0.475	0.11	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	120%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1122877		
Lab Sample ID:	M83766-3	Date Sampled:	06/18/09
Matrix:	AQ - Ground Water	Date Received:	06/18/09
Method:	SW846 8082 SW846 3510C	Percent Solids:	n/a
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB26444.D	1	06/30/09	CZ	06/25/09	OP18816	GBB1084
Run #2							

	Initial Volume	Final Volume
Run #1	800 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.31	ug/l	
11104-28-2	Aroclor 1221	ND	0.31	ug/l	
11141-16-5	Aroclor 1232	ND	0.31	ug/l	
53469-21-9	Aroclor 1242	ND	0.31	ug/l	
12672-29-6	Aroclor 1248	ND	0.31	ug/l	
11097-69-1	Aroclor 1254	ND	0.31	ug/l	
11096-82-5	Aroclor 1260	ND	0.31	ug/l	
37324-23-5	Aroclor 1262	ND	0.31	ug/l	
11100-14-4	Aroclor 1268	ND	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	89%		30-150%
877-09-8	Tetrachloro-m-xylene	89%		30-150%
2051-24-3	Decachlorobiphenyl	100%		30-150%
2051-24-3	Decachlorobiphenyl	92%		30-150%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1122877UF**Lab Sample ID:** M83766-4**Matrix:** AQ - Ground Water**Date Sampled:** 06/18/09**Date Received:** 06/18/09**Percent Solids:** n/a**Project:** UTC:2009 Quarterly GW-F&H Buildings**Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Barium	< 200	200	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Cadmium	< 4.0	4.0	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Chromium	< 10	10	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Copper	< 25	25	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Lead	< 5.0	5.0	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	06/23/09	06/24/09 MA	SW846 7470A ¹	SW846 7470A ⁴
Nickel	< 40	40	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Selenium	< 10	10	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Silver	< 5.0	5.0	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Zinc	< 20	20	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³

(1) Instrument QC Batch: MA10613

(2) Instrument QC Batch: MA10626

(3) Prep QC Batch: MP13688

(4) Prep QC Batch: MP13693

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1122878		
Lab Sample ID:	M83766-5	Date Sampled:	06/18/09
Matrix:	AQ - Ground Water	Date Received:	06/18/09
Method:	SW846 8260B	Percent Solids:	n/a
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G91125.D	1	06/25/09	EL	n/a	n/a	MSG3684
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1122878	Date Sampled:	06/18/09
Lab Sample ID:	M83766-5	Date Received:	06/18/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1122878	Date Sampled:	06/18/09
Lab Sample ID:	M83766-5	Date Received:	06/18/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	100%		70-130%
460-00-4	4-Bromofluorobenzene	100%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1122878
Lab Sample ID: M83766-5
Matrix: AQ - Ground Water
Method: CT-ETPH 7/06 SW846 3510C
Project: UTC:2009 Quarterly GW-F&H Buildings

Date Sampled: 06/18/09
Date Received: 06/18/09
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BC28234.D	1	06/29/09	WZ	06/25/09	OP18815	GBC1532
Run #2							

	Initial Volume	Final Volume
Run #1	700 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	0.297	0.11	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	111%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1122878
Lab Sample ID: M83766-5
Matrix: AQ - Ground Water
Method: SW846 8082 SW846 3510C
Project: UTC:2009 Quarterly GW-F&H Buildings

Date Sampled: 06/18/09
Date Received: 06/18/09
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB26445.D	1	06/30/09	CZ	06/25/09	OP18816	GBB1084
Run #2							

	Initial Volume	Final Volume
Run #1	800 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.31	ug/l	
11104-28-2	Aroclor 1221	ND	0.31	ug/l	
11141-16-5	Aroclor 1232	ND	0.31	ug/l	
53469-21-9	Aroclor 1242	ND	0.31	ug/l	
12672-29-6	Aroclor 1248	ND	0.31	ug/l	
11097-69-1	Aroclor 1254	ND	0.31	ug/l	
11096-82-5	Aroclor 1260	ND	0.31	ug/l	
37324-23-5	Aroclor 1262	ND	0.31	ug/l	
11100-14-4	Aroclor 1268	ND	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	91%		30-150%
877-09-8	Tetrachloro-m-xylene	95%		30-150%
2051-24-3	Decachlorobiphenyl	112%		30-150%
2051-24-3	Decachlorobiphenyl	114%		30-150%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1122878UF**Lab Sample ID:** M83766-6**Matrix:** AQ - Ground Water**Date Sampled:** 06/18/09**Date Received:** 06/18/09**Percent Solids:** n/a**Project:** UTC:2009 Quarterly GW-F&H Buildings**Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Barium	< 200	200	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Cadmium	< 4.0	4.0	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Chromium	< 10	10	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Copper	< 25	25	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Lead	< 5.0	5.0	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	06/23/09	06/24/09 MA	SW846 7470A ¹	SW846 7470A ⁴
Nickel	< 40	40	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Selenium	< 10	10	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Silver	< 5.0	5.0	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Zinc	< 20	20	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³

(1) Instrument QC Batch: MA10613

(2) Instrument QC Batch: MA10626

(3) Prep QC Batch: MP13688

(4) Prep QC Batch: MP13693

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1122881		
Lab Sample ID:	M83766-7	Date Sampled:	06/18/09
Matrix:	AQ - Ground Water	Date Received:	06/18/09
Method:	SW846 8260B	Percent Solids:	n/a
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G91126.D	1	06/25/09	EL	n/a	n/a	MSG3684
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1122881	Date Sampled:	06/18/09
Lab Sample ID:	M83766-7	Date Received:	06/18/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1122881	Date Sampled:	06/18/09
Lab Sample ID:	M83766-7	Date Received:	06/18/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	101%		70-130%
460-00-4	4-Bromofluorobenzene	100%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1122881
Lab Sample ID: M83766-7
Matrix: AQ - Ground Water
Method: CT-ETPH 7/06 SW846 3510C
Project: UTC:2009 Quarterly GW-F&H Buildings

Date Sampled: 06/18/09
Date Received: 06/18/09
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BC28235.D	1	06/29/09	WZ	06/25/09	OP18815	GBC1532
Run #2							

	Initial Volume	Final Volume
Run #1	700 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	0.248	0.11	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
3386-33-2	1-Chlorooctadecane	79%		50-149%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1122881		
Lab Sample ID:	M83766-7	Date Sampled:	06/18/09
Matrix:	AQ - Ground Water	Date Received:	06/18/09
Method:	SW846 8082 SW846 3510C	Percent Solids:	n/a
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB26446.D	1	06/30/09	CZ	06/25/09	OP18816	GBB1084
Run #2							

	Initial Volume	Final Volume
Run #1	800 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.31	ug/l	
11104-28-2	Aroclor 1221	ND	0.31	ug/l	
11141-16-5	Aroclor 1232	ND	0.31	ug/l	
53469-21-9	Aroclor 1242	ND	0.31	ug/l	
12672-29-6	Aroclor 1248	ND	0.31	ug/l	
11097-69-1	Aroclor 1254	ND	0.31	ug/l	
11096-82-5	Aroclor 1260	ND	0.31	ug/l	
37324-23-5	Aroclor 1262	ND	0.31	ug/l	
11100-14-4	Aroclor 1268	ND	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	102%		30-150%
877-09-8	Tetrachloro-m-xylene	100%		30-150%
2051-24-3	Decachlorobiphenyl	75%		30-150%
2051-24-3	Decachlorobiphenyl	69%		30-150%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1122881UF**Lab Sample ID:** M83766-8**Matrix:** AQ - Ground Water**Date Sampled:** 06/18/09**Date Received:** 06/18/09**Percent Solids:** n/a**Project:** UTC:2009 Quarterly GW-F&H Buildings**Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Barium	< 200	200	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Cadmium	< 4.0	4.0	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Chromium	< 10	10	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Copper	< 25	25	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Lead	< 5.0	5.0	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	06/23/09	06/24/09 MA	SW846 7470A ¹	SW846 7470A ⁴
Nickel	< 40	40	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Selenium	< 10	10	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Silver	< 5.0	5.0	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Zinc	< 20	20	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³

(1) Instrument QC Batch: MA10613

(2) Instrument QC Batch: MA10626

(3) Prep QC Batch: MP13688

(4) Prep QC Batch: MP13693

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1122882	Date Sampled:	06/18/09
Lab Sample ID:	M83766-9	Date Received:	06/18/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G91180.D	1	06/26/09	EL	n/a	n/a	MSG3686
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1122882	Date Sampled:	06/18/09
Lab Sample ID:	M83766-9	Date Received:	06/18/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1122882	Date Sampled:	06/18/09
Lab Sample ID:	M83766-9	Date Received:	06/18/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	101%		70-130%
460-00-4	4-Bromofluorobenzene	100%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1122880UF**Lab Sample ID:** M83766-10**Matrix:** AQ - Ground Water**Date Sampled:** 06/18/09**Date Received:** 06/18/09**Percent Solids:** n/a**Project:** UTC:2009 Quarterly GW-F&H Buildings**Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Barium	< 200	200	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Cadmium	< 4.0	4.0	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Chromium	< 10	10	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Copper	< 25	25	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Lead	< 5.0	5.0	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	06/23/09	06/24/09 MA	SW846 7470A ¹	SW846 7470A ⁴
Nickel	< 40	40	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Selenium	< 10	10	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Silver	< 5.0	5.0	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Zinc	< 20	20	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³

(1) Instrument QC Batch: MA10613

(2) Instrument QC Batch: MA10626

(3) Prep QC Batch: MP13688

(4) Prep QC Batch: MP13693

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1122873		
Lab Sample ID:	M83766-11	Date Sampled:	06/18/09
Matrix:	AQ - Ground Water	Date Received:	06/18/09
Method:	SW846 8260B	Percent Solids:	n/a
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G91128.D	1	06/25/09	EL	n/a	n/a	MSG3684
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1122873

Lab Sample ID: M83766-11

Date Sampled: 06/18/09

Matrix: AQ - Ground Water

Date Received: 06/18/09

Method: SW846 8260B

Percent Solids: n/a

Project: UTC:2009 Quarterly GW-F&H Buildings

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	2.3	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	3.0	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1122873	Date Sampled:	06/18/09
Lab Sample ID:	M83766-11	Date Received:	06/18/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	101%		70-130%
460-00-4	4-Bromofluorobenzene	101%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1122873**Lab Sample ID:** M83766-11**Date Sampled:** 06/18/09**Matrix:** AQ - Ground Water**Date Received:** 06/18/09**Method:** CT-ETPH 7/06 SW846 3510C**Percent Solids:** n/a**Project:** UTC:2009 Quarterly GW-F&H Buildings

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BC28237.D	1	06/29/09	WZ	06/25/09	OP18815	GBC1532
Run #2							

	Initial Volume	Final Volume
Run #1	980 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	0.284	0.082	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	104%		50-149%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1122873		
Lab Sample ID:	M83766-11	Date Sampled:	06/18/09
Matrix:	AQ - Ground Water	Date Received:	06/18/09
Method:	SW846 8082 SW846 3510C	Percent Solids:	n/a
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB26447.D	1	06/30/09	CZ	06/25/09	OP18816	GBB1084
Run #2							

	Initial Volume	Final Volume
Run #1	800 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.31	ug/l	
11104-28-2	Aroclor 1221	ND	0.31	ug/l	
11141-16-5	Aroclor 1232	ND	0.31	ug/l	
53469-21-9	Aroclor 1242	ND	0.31	ug/l	
12672-29-6	Aroclor 1248	ND	0.31	ug/l	
11097-69-1	Aroclor 1254	ND	0.31	ug/l	
11096-82-5	Aroclor 1260	ND	0.31	ug/l	
37324-23-5	Aroclor 1262	ND	0.31	ug/l	
11100-14-4	Aroclor 1268	ND	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	100%		30-150%
877-09-8	Tetrachloro-m-xylene	103%		30-150%
2051-24-3	Decachlorobiphenyl	117%		30-150%
2051-24-3	Decachlorobiphenyl	99%		30-150%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1122873UF	Date Sampled:	06/18/09
Lab Sample ID:	M83766-12	Date Received:	06/18/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	UTC:2009 Quarterly GW-F&H Buildings		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Barium	< 200	200	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Cadmium	< 4.0	4.0	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Chromium	< 10	10	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Copper	< 25	25	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Lead	< 5.0	5.0	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	06/23/09	06/24/09 MA	SW846 7470A ¹	SW846 7470A ⁴
Nickel	< 40	40	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Selenium	< 10	10	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Silver	< 5.0	5.0	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Zinc	< 20	20	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³

(1) Instrument QC Batch: MA10613

(2) Instrument QC Batch: MA10626

(3) Prep QC Batch: MP13688

(4) Prep QC Batch: MP13693

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1122874	Date Sampled:	06/18/09
Lab Sample ID:	M83766-13	Date Received:	06/18/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G91129.D	1	06/25/09	EL	n/a	n/a	MSG3684
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1122874	Date Sampled:	06/18/09
Lab Sample ID:	M83766-13	Date Received:	06/18/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	1.3	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1122874	Date Sampled:	06/18/09
Lab Sample ID:	M83766-13	Date Received:	06/18/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	102%		70-130%
460-00-4	4-Bromofluorobenzene	99%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1122874
Lab Sample ID: M83766-13
Matrix: AQ - Ground Water
Method: CT-ETPH 7/06 SW846 3510C
Project: UTC:2009 Quarterly GW-F&H Buildings

Date Sampled: 06/18/09
Date Received: 06/18/09
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BC28238.D	1	06/29/09	WZ	06/25/09	OP18815	GBC1532
Run #2							

	Initial Volume	Final Volume
Run #1	800 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	0.850	0.10	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
3386-33-2	1-Chlorooctadecane	100%		50-149%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1122874		
Lab Sample ID:	M83766-13	Date Sampled:	06/18/09
Matrix:	AQ - Ground Water	Date Received:	06/18/09
Method:	SW846 8082 SW846 3510C	Percent Solids:	n/a
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB26448.D	1	06/30/09	CZ	06/25/09	OP18816	GBB1084
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.28	ug/l	
11104-28-2	Aroclor 1221	ND	0.28	ug/l	
11141-16-5	Aroclor 1232	ND	0.28	ug/l	
53469-21-9	Aroclor 1242	ND	0.28	ug/l	
12672-29-6	Aroclor 1248	ND	0.28	ug/l	
11097-69-1	Aroclor 1254	ND	0.28	ug/l	
11096-82-5	Aroclor 1260	ND	0.28	ug/l	
37324-23-5	Aroclor 1262	ND	0.28	ug/l	
11100-14-4	Aroclor 1268	ND	0.28	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	106%		30-150%
877-09-8	Tetrachloro-m-xylene	107%		30-150%
2051-24-3	Decachlorobiphenyl	119%		30-150%
2051-24-3	Decachlorobiphenyl	104%		30-150%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1122874UF**Lab Sample ID:** M83766-14**Matrix:** AQ - Ground Water**Date Sampled:** 06/18/09**Date Received:** 06/18/09**Percent Solids:** n/a**Project:** UTC:2009 Quarterly GW-F&H Buildings**Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Barium	< 200	200	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Cadmium	< 4.0	4.0	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Chromium	< 10	10	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Copper	< 25	25	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Lead	< 5.0	5.0	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	06/23/09	06/24/09 MA	SW846 7470A ¹	SW846 7470A ⁴
Nickel	< 40	40	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Selenium	< 10	10	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Silver	< 5.0	5.0	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Zinc	< 20	20	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³

(1) Instrument QC Batch: MA10613

(2) Instrument QC Batch: MA10626

(3) Prep QC Batch: MP13688

(4) Prep QC Batch: MP13693

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1122875		
Lab Sample ID:	M83766-15	Date Sampled:	06/18/09
Matrix:	AQ - Ground Water	Date Received:	06/18/09
Method:	SW846 8260B	Percent Solids:	n/a
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G91130.D	1	06/25/09	EL	n/a	n/a	MSG3684
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1122875	Date Sampled:	06/18/09
Lab Sample ID:	M83766-15	Date Received:	06/18/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	75.2	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	1.1	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	1.3	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1122875	Date Sampled:	06/18/09
Lab Sample ID:	M83766-15	Date Received:	06/18/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	101%		70-130%
460-00-4	4-Bromofluorobenzene	102%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1122875**Lab Sample ID:** M83766-15**Date Sampled:** 06/18/09**Matrix:** AQ - Ground Water**Date Received:** 06/18/09**Method:** CT-ETPH 7/06 SW846 3510C**Percent Solids:** n/a**Project:** UTC:2009 Quarterly GW-F&H Buildings

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BC28239.D	1	06/29/09	WZ	06/25/09	OP18815	GBC1532
Run #2							

	Initial Volume	Final Volume
Run #1	800 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	0.322	0.10	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	102%		50-149%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1122875		
Lab Sample ID:	M83766-15	Date Sampled:	06/18/09
Matrix:	AQ - Ground Water	Date Received:	06/18/09
Method:	SW846 8082 SW846 3510C	Percent Solids:	n/a
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB26450.D	1	06/30/09	CZ	06/25/09	OP18816	GBB1084
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.28	ug/l	
11104-28-2	Aroclor 1221	ND	0.28	ug/l	
11141-16-5	Aroclor 1232	ND	0.28	ug/l	
53469-21-9	Aroclor 1242	ND	0.28	ug/l	
12672-29-6	Aroclor 1248	ND	0.28	ug/l	
11097-69-1	Aroclor 1254	ND	0.28	ug/l	
11096-82-5	Aroclor 1260	ND	0.28	ug/l	
37324-23-5	Aroclor 1262	ND	0.28	ug/l	
11100-14-4	Aroclor 1268	ND	0.28	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	107%		30-150%
877-09-8	Tetrachloro-m-xylene	102%		30-150%
2051-24-3	Decachlorobiphenyl	108%		30-150%
2051-24-3	Decachlorobiphenyl	90%		30-150%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1122875UF**Lab Sample ID:** M83766-16**Matrix:** AQ - Ground Water**Date Sampled:** 06/18/09**Date Received:** 06/18/09**Percent Solids:** n/a**Project:** UTC:2009 Quarterly GW-F&H Buildings**Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Barium	< 200	200	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Cadmium	< 4.0	4.0	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Chromium	< 10	10	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Copper	< 25	25	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Lead	< 5.0	5.0	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	06/23/09	06/24/09 MA	SW846 7470A ¹	SW846 7470A ⁴
Nickel	< 40	40	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Selenium	< 10	10	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Silver	< 5.0	5.0	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³
Zinc	< 20	20	ug/l	1	06/22/09	06/25/09 PY	SW846 6010B ²	SW846 3010A ³

(1) Instrument QC Batch: MA10613

(2) Instrument QC Batch: MA10626

(3) Prep QC Batch: MP13688

(4) Prep QC Batch: MP13693

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1122880	Date Sampled:	06/18/09
Lab Sample ID:	M83766-17	Date Received:	06/18/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G91131.D	1	06/25/09	EL	n/a	n/a	MSG3684
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1122880	Date Sampled:	06/18/09
Lab Sample ID:	M83766-17	Date Received:	06/18/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	73.6	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	1.0	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	1.2	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1122880	Date Sampled:	06/18/09
Lab Sample ID:	M83766-17	Date Received:	06/18/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	101%		70-130%
460-00-4	4-Bromofluorobenzene	100%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1122880
Lab Sample ID: M83766-17
Matrix: AQ - Ground Water
Method: CT-ETPH 7/06 SW846 3510C
Project: UTC:2009 Quarterly GW-F&H Buildings

Date Sampled: 06/18/09
Date Received: 06/18/09
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BC28240.D	1	06/29/09	WZ	06/25/09	OP18815	GBC1532
Run #2							

	Initial Volume	Final Volume
Run #1	800 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	0.334	0.10	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
3386-33-2	1-Chlorooctadecane	107%		50-149%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1122880		
Lab Sample ID:	M83766-17	Date Sampled:	06/18/09
Matrix:	AQ - Ground Water	Date Received:	06/18/09
Method:	SW846 8082 SW846 3510C	Percent Solids:	n/a
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB26451.D	1	06/30/09	CZ	06/25/09	OP18816	GBB1084
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.26	ug/l	
11104-28-2	Aroclor 1221	ND	0.26	ug/l	
11141-16-5	Aroclor 1232	ND	0.26	ug/l	
53469-21-9	Aroclor 1242	ND	0.26	ug/l	
12672-29-6	Aroclor 1248	ND	0.26	ug/l	
11097-69-1	Aroclor 1254	ND	0.26	ug/l	
11096-82-5	Aroclor 1260	ND	0.26	ug/l	
37324-23-5	Aroclor 1262	ND	0.26	ug/l	
11100-14-4	Aroclor 1268	ND	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	117%		30-150%
877-09-8	Tetrachloro-m-xylene	116%		30-150%
2051-24-3	Decachlorobiphenyl	115%		30-150%
2051-24-3	Decachlorobiphenyl	113%		30-150%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Certification Exceptions (CT)
- Chain of Custody
- RCP Form
- Sample Tracking Chronicle

Parameter Certification Exceptions

Job Number: M83766
Account: LEA Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
Aroclor 1262	37324-23-5	SW846 8082	AQ	Certified by SOP MGC204/GC-ECD
Aroclor 1268	11100-14-4	SW846 8082	AQ	Certified by SOP MGC204/GC-ECD

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CHAIN OF CUSTODY

495 TECHNOLOGY CENTER WEST • BUILDING ONE
MARLBOROUGH, MA 01752
TEL: 508-481-6200 • FAX: 508-481-7753

ACCUTEST JOB #:

1783 706

ACCUTEST QUOTE

TE #: KRI/2009 - 435

CLIENT INFORMATION			FACILITY INFORMATION			ANALYTICAL INFORMATION			MATRIX CODES												
NAME 100 Northwest Dr ADDRESS Plainville CT 06062 CITY, STATE ZIP Note: Common SEND REPORT TO: PHONE # (860) 747-6181			F+H Groundwater Monitoring PROJECT NAME East Hartford CT LOCATION 880T908 PROJECT NO. FAX #			VOC's PCB's CT ETPH Metals REACH + Cadi 2a			DW - DRINKING WATER GW - GROUND WATER WW - WASTE WATER SO - SOIL SL - SLUDGE OI - OIL LIQ - OTHER LIQUID SOL - OTHER SOLID												
ACCUTEST SAMPLE #		FIELD ID / POINT OF COLLECTION		COLLECTION		PRESERVATION				LAB USE ONLY											
				DATE	TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	HCl	NH ₄ OH	NH ₄ SCN	NH ₄ NO ₃	NONE	OTHER							
-1	1122876	6/18/09	9:40	NE	6W	2	X						X	X							
-2	1122876 wF		9:40			1				X			X			X					
-1	1122876		9:40			4						X	X		X	X					
-3	1122877		12:00			2	X					X	X		X						
-4	1122877 wF		12:00			1				X		X				X					
-3	1122877		12:00			4						X	X		X	X					
-5	1122878		13:55			2	X					X	X								
-6	1122878 wF		13:55			1				X		X				X					
-5	1122878	6/18/09	13:55	NE		4						X	X		X	X					
DATA TURNAROUND INFORMATION			DATA DELIVERABLE INFORMATION			COMMENTS/REMARKS															
<input checked="" type="checkbox"/> 14 DAYS STANDARD APPROVED BY: _____ <input type="checkbox"/> 7 DAYS RUSH <input type="checkbox"/> 48 HOUR EMERGENCY <input type="checkbox"/> OTHER			<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> COMMERCIAL "B" <input type="checkbox"/> DISK DELIVERABLE <input type="checkbox"/> STATE FORMS <input type="checkbox"/> OTHER (SPECIFY) _____			16D, 5B, 3N6															
14 DAY TURNAROUND HARD COPY, EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED																					
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY																					
RELINQUISHED BY SAMPLER:			DATE TIME:			RECEIVED BY:			DATE TIME:			RECEIVED BY:									
1. Nathan Fumano			6/18/09 1600			2. [Signature]			6/18/09 1830			2. B e									
RELINQUISHED BY:			DATE TIME:			RECEIVED BY:			DATE TIME:			RECEIVED BY:									
3.						3.						4.									
RELINQUISHED BY:			DATE TIME:			RECEIVED BY:			DATE TIME:			RECEIVED BY:									
5.						5.						5.									
						SEAL #			PRESERVE WHERE APPLICABLE			ON ICE			TEMPERATURE						
															25						

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M83766: Chain of Custody

Page 1 of 3

**ACCUTEST.**

Laboratories

2/3

CHAIN OF CUSTODY495 TECHNOLOGY CENTER WEST • BUILDING ONE
MARLBOROUGH, MA 01752
TEL: 508-481-6200 • FAX: 508-481-7753

ACCUTEST JOB #:

M83766

ACCUTEST QUOTE #:

KBI-2009/435

CLIENT INFORMATION		FACILITY INFORMATION		ANALYTICAL INFORMATION		MATRIX CODES	
NAME LEA		PROJECT NAME FTH Groundwater Monitoring		VOCs PCBs CT-ETPH Metals: Pb, Cd, Cr, Ni, Zn		DW - DRINKING WATER GW - GROUND WATER WW - WASTE WATER SO - SOIL SL - SLUDGE OI - OIL LIQ - OTHER LIQUID SOL - OTHER SOLID	
ADDRESS 100 Northwest Dr		LOCATION East Hartford					
CITY, STATE, ZIP Plainville CT 06062		PROJECT NO. 880T 908					
SEND REPORT TO: PHONE # (860) 747-6181		FAX #					
FIELD ID / POINT OF COLLECTION		COLLECTION					
ACCUTEST SAMPLE #	DATE	TIME	SAMPLED BY	MATRIX	# OF BOTTLES	PRESERVATION	LAB USE ONLY
-7	6/18/09	14:05	NE		2	X	
-8		14:05	J		1	X	
-7		14:05	J		4	X	
-9		8:30	NE		1	X	
-10	6/18/09	13:30	SB		1	X	
DATA TURNAROUND INFORMATION		DATA DELIVERABLE INFORMATION		COMMENTS/REMARKS			
<input checked="" type="checkbox"/> 14 DAYS STANDARD <input type="checkbox"/> 7 DAYS RUSH <input type="checkbox"/> 48 HOUR EMERGENCY <input type="checkbox"/> OTHER		<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> COMMERCIAL "B" <input type="checkbox"/> DISK DELIVERABLE <input type="checkbox"/> STATE FORMS <input type="checkbox"/> OTHER (SPECIFY)					
APPROVED BY: _____		APPROVED BY: _____					
14 DAY TURNAROUND HARDCOPY. EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED							
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY							
RELINQUISHED BY: 1. Mark Emmons	DATE TIME: 6/18/09	RECEIVED BY: 1. [Signature]	DATE TIME:	RELINQUISHED BY: 2.	DATE TIME:	RECEIVED BY: 2.	
RELINQUISHED BY: 3.	DATE TIME:	RECEIVED BY: 3.		RELINQUISHED BY: 4.	DATE TIME:	RECEIVED BY: 4.	
RELINQUISHED BY: 5.	DATE TIME:	RECEIVED BY: 5.	SEAL #	PRESERVE WHERE APPLICABLE <input type="checkbox"/>		ON ICE <input type="checkbox"/>	TEMPERATURE _____ C

M83766: Chain of Custody

Page 2 of 3

Reasonable Confidence Protocol Laboratory Analysis QA/QC Certification Form

Laboratory Name: Accutest New England Client: Loureiro Eng. Associates

Project Location: UTC:2009 Quarterly GW-F&H Buildings Project Number: 88UT908

Sampling Date(s): 6/18/2009

Laboratory Sample ID(s): M83766-12, M83766-13, M83766-14, M83766-15, M83766-16, M83766-8, M83766-9, M83766-10, M83766-11, M83766-1, M83766-2, M83766-3, M83766-4, M83766-5, M83766-6, M83766-7, M83766-17

Methods: CT-ETPH 7/06, SW846 6010B, SW846 7470A, SW846 8082, 8260B

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CTDEP method-specific Reasonable Confidence Protocol documents)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1A	Where all the method specified preservation and holding time requirements met?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1B	VPH and EPH methods only: Was the VPH or EPH method conducted without significant modifications (See section 11.3 of respective methods)	Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input checked="" type="checkbox"/>
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
3	Were samples received at an appropriate temperature (<6° C)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
4	Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
5	a) Were reporting limits specified or referenced on the chain-of-custody?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
	b) Were these reporting limits met?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Note: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence".

I, the undersigned, attest under pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized

Signature:

Position: Lab Director

Printed Name: Reza Tand
Accutest New England

Date: 7/2/2009

Internal Sample Tracking Chronicle

Loureiro Eng. Associates

Job No: M83766

UTC:2009 Quarterly GW-F&H Buildings
Project No: 88UT908

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M83766-1 1122876	Collected: 18-JUN-09 09:40	By: NE	Received: 18-JUN-09	By: JB		
M83766-1	SW846 8260B	25-JUN-09 16:56	EL			V8260RCP
M83766-1	CT-ETPH 7/06	29-JUN-09 17:16	WZ	25-JUN-09	RJ	BCTTPH
M83766-1	SW846 8082	30-JUN-09 04:24	CZ	25-JUN-09	RJ	P8082RCP
M83766-2 1122876UF	Collected: 18-JUN-09 09:40	By: NE	Received: 18-JUN-09	By: JB		
M83766-2	SW846 7470A	24-JUN-09 12:00	MA	23-JUN-09	MA	HG
M83766-2	SW846 6010B	25-JUN-09 12:16	PY	22-JUN-09	EAL	AG,AS,BA,CD,CR,CU,NI,PB,SE, ZN
M83766-3 1122877	Collected: 18-JUN-09 12:00	By: NE	Received: 18-JUN-09	By: JB		
M83766-3	SW846 8260B	25-JUN-09 17:24	EL			V8260RCP
M83766-3	CT-ETPH 7/06	29-JUN-09 17:55	WZ	25-JUN-09	RJ	BCTTPH
M83766-3	SW846 8082	30-JUN-09 05:03	CZ	25-JUN-09	RJ	P8082RCP
M83766-4 1122877UF	Collected: 18-JUN-09 12:00	By: NE	Received: 18-JUN-09	By: JB		
M83766-4	SW846 7470A	24-JUN-09 12:02	MA	23-JUN-09	MA	HG
M83766-4	SW846 6010B	25-JUN-09 13:26	PY	22-JUN-09	EAL	AG,AS,BA,CD,CR,CU,NI,PB,SE, ZN
M83766-5 1122878	Collected: 18-JUN-09 13:55	By: NE	Received: 18-JUN-09	By: JB		
M83766-5	SW846 8260B	25-JUN-09 17:52	EL			V8260RCP
M83766-5	CT-ETPH 7/06	29-JUN-09 18:35	WZ	25-JUN-09	RJ	BCTTPH
M83766-5	SW846 8082	30-JUN-09 05:42	CZ	25-JUN-09	RJ	P8082RCP
M83766-6 1122878UF	Collected: 18-JUN-09 13:55	By: NE	Received: 18-JUN-09	By: JB		
M83766-6	SW846 7470A	24-JUN-09 12:04	MA	23-JUN-09	MA	HG

Internal Sample Tracking Chronicle

Loureiro Eng. Associates

Job No: M83766

UTC:2009 Quarterly GW-F&H Buildings

Project No: 88UT908

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M83766-6	SW846 6010B	25-JUN-09 13:31	PY	22-JUN-09	EAL	AG,AS,BA,CD,CR,CU,NI,PB,SE,ZN
M83766-7 1122881	Collected: 18-JUN-09 14:05 By: NE		Received: 18-JUN-09 By: JB			
M83766-7	SW846 8260B	25-JUN-09 18:20	EL			V8260RCP
M83766-7	CT-ETPH 7/06	29-JUN-09 19:15	WZ	25-JUN-09	RJ	BCTTPH
M83766-7	SW846 8082	30-JUN-09 06:21	CZ	25-JUN-09	RJ	P8082RCP
M83766-8 1122881UF	Collected: 18-JUN-09 14:05 By: NE		Received: 18-JUN-09 By: JB			
M83766-8	SW846 7470A	24-JUN-09 12:07	MA	23-JUN-09	MA	HG
M83766-8	SW846 6010B	25-JUN-09 13:35	PY	22-JUN-09	EAL	AG,AS,BA,CD,CR,CU,NI,PB,SE,ZN
M83766-9 1122882	Collected: 18-JUN-09 08:30 By: NE		Received: 18-JUN-09 By: JB			
M83766-9	SW846 8260B	26-JUN-09 20:41	EL			V8260RCP
M83766-10 1122880UF	Collected: 18-JUN-09 13:30 By: SB		Received: 18-JUN-09 By: JB			
M83766-10	SW846 7470A	24-JUN-09 12:09	MA	23-JUN-09	MA	HG
M83766-10	SW846 6010B	25-JUN-09 13:39	PY	22-JUN-09	EAL	AG,AS,BA,CD,CR,CU,NI,PB,SE,ZN
M83766-11 1122873	Collected: 18-JUN-09 09:30 By: CSB		Received: 18-JUN-09 By: JB			
M83766-11	SW846 8260B	25-JUN-09 19:16	EL			V8260RCP
M83766-11	CT-ETPH 7/06	29-JUN-09 20:34	WZ	25-JUN-09	RJ	BCTTPH
M83766-11	SW846 8082	30-JUN-09 06:59	CZ	25-JUN-09	RJ	P8082RCP
M83766-12 1122873UF	Collected: 18-JUN-09 09:30 By: CSB		Received: 18-JUN-09 By: JB			
M83766-12	SW846 7470A	24-JUN-09 12:11	MA	23-JUN-09	MA	HG

Internal Sample Tracking Chronicle

Loureiro Eng. Associates

Job No: M83766

UTC:2009 Quarterly GW-F&H Buildings

Project No: 88UT908

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M83766-12	SW846 6010B	25-JUN-09 13:44	PY	22-JUN-09	EAL	AG,AS,BA,CD,CR,CU,NI,PB,SE,ZN
M83766-13 Collected: 18-JUN-09 11:10 By: CSB Received: 18-JUN-09 By: JB 1122874						
M83766-13	SW846 8260B	25-JUN-09 19:44	EL			V8260RCP
M83766-13	CT-ETPH 7/06	29-JUN-09 21:14	WZ	25-JUN-09	RJ	BCTTPH
M83766-13	SW846 8082	30-JUN-09 07:38	CZ	25-JUN-09	RJ	P8082RCP
M83766-14 Collected: 18-JUN-09 11:10 By: CSB Received: 18-JUN-09 By: JB 1122874UF						
M83766-14	SW846 7470A	24-JUN-09 12:13	MA	23-JUN-09	MA	HG
M83766-14	SW846 6010B	25-JUN-09 13:48	PY	22-JUN-09	EAL	AG,AS,BA,CD,CR,CU,NI,PB,SE,ZN
M83766-15 Collected: 18-JUN-09 13:30 By: CSB Received: 18-JUN-09 By: JB 1122875						
M83766-15	SW846 8260B	25-JUN-09 20:12	EL			V8260RCP
M83766-15	CT-ETPH 7/06	29-JUN-09 21:54	WZ	25-JUN-09	RJ	BCTTPH
M83766-15	SW846 8082	30-JUN-09 08:56	CZ	25-JUN-09	RJ	P8082RCP
M83766-16 Collected: 18-JUN-09 13:30 By: CSB Received: 18-JUN-09 By: JB 1122875UF						
M83766-16	SW846 7470A	24-JUN-09 12:15	MA	23-JUN-09	MA	HG
M83766-16	SW846 6010B	25-JUN-09 13:52	PY	22-JUN-09	EAL	AG,AS,BA,CD,CR,CU,NI,PB,SE,ZN
M83766-17 Collected: 18-JUN-09 13:30 By: CSB Received: 18-JUN-09 By: JB 1122880						
M83766-17	SW846 8260B	25-JUN-09 20:40	EL			V8260RCP
M83766-17	CT-ETPH 7/06	29-JUN-09 22:34	WZ	25-JUN-09	RJ	BCTTPH
M83766-17	SW846 8082	30-JUN-09 09:35	CZ	25-JUN-09	RJ	P8082RCP



GC/MS Volatiles

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Page 1 of 3

Job Number: M83766

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG3684-MB	G91113.D	1	06/25/09	EL	n/a	n/a	MSG3684

The QC reported here applies to the following samples:

Method: SW846 8260B

M83766-1, M83766-3, M83766-5, M83766-7, M83766-11, M83766-13, M83766-15, M83766-17

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	

Method Blank Summary

Page 2 of 3

Job Number: M83766
Account: LEA Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG3684-MB	G91113.D	1	06/25/09	EL	n/a	n/a	MSG3684

The QC reported here applies to the following samples:

Method: SW846 8260B

M83766-1, M83766-3, M83766-5, M83766-7, M83766-11, M83766-13, M83766-15, M83766-17

CAS No.	Compound	Result	RL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

Method Blank Summary

Job Number: M83766
Account: LEA Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG3684-MB	G91113.D	1	06/25/09	EL	n/a	n/a	MSG3684

The QC reported here applies to the following samples: Method: SW846 8260B

M83766-1, M83766-3, M83766-5, M83766-7, M83766-11, M83766-13, M83766-15, M83766-17

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	101% 70-130%
2037-26-5	Toluene-D8	99% 70-130%
460-00-4	4-Bromofluorobenzene	101% 70-130%

Method Blank Summary

Page 1 of 3

Job Number: M83766**Account:** LEA Loureiro Eng. Associates**Project:** UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG3686-MB	G91163.D	1	06/26/09	EL	n/a	n/a	MSG3686

The QC reported here applies to the following samples:**Method:** SW846 8260B

M83766-9

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	10.2	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	

Method Blank Summary

Page 2 of 3

Job Number: M83766
Account: LEA Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG3686-MB	G91163.D	1	06/26/09	EL	n/a	n/a	MSG3686

The QC reported here applies to the following samples:

Method: SW846 8260B

M83766-9

CAS No.	Compound	Result	RL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

Method Blank Summary

Job Number: M83766
Account: LEA Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG3686-MB	G91163.D	1	06/26/09	EL	n/a	n/a	MSG3686

The QC reported here applies to the following samples:

Method: SW846 8260B

M83766-9

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	98% 70-130%
2037-26-5	Toluene-D8	99% 70-130%
460-00-4	4-Bromofluorobenzene	103% 70-130%

Blank Spike Summary

Page 1 of 3

Job Number: M83766
Account: LEA Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG3684-B5	G91111.D	1	06/25/09	EL	n/a	n/a	MSG3684

The QC reported here applies to the following samples:

Method: SW846 8260B

M83766-1, M83766-3, M83766-5, M83766-7, M83766-11, M83766-13, M83766-15, M83766-17

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	43.6	87	70-130
107-13-1	Acrylonitrile	250	248	99	70-130
71-43-2	Benzene	50	45.3	91	70-130
108-86-1	Bromobenzene	50	49.0	98	70-130
75-27-4	Bromodichloromethane	50	50.2	100	70-130
75-25-2	Bromoform	50	50.1	100	70-130
74-83-9	Bromomethane	50	38.8	78	70-130
78-93-3	2-Butanone (MEK)	50	45.8	92	70-130
104-51-8	n-Butylbenzene	50	51.6	103	70-130
135-98-8	sec-Butylbenzene	50	51.5	103	70-130
98-06-6	tert-Butylbenzene	50	50.6	101	70-130
75-15-0	Carbon disulfide	50	43.8	88	70-130
56-23-5	Carbon tetrachloride	50	46.8	94	70-130
108-90-7	Chlorobenzene	50	48.2	96	70-130
75-00-3	Chloroethane	50	43.5	87	70-130
67-66-3	Chloroform	50	47.4	95	70-130
74-87-3	Chloromethane	50	29.5	59* a	70-130
95-49-8	o-Chlorotoluene	50	49.2	98	70-130
106-43-4	p-Chlorotoluene	50	49.0	98	70-130
96-12-8	1,2-Dibromo-3-chloropropane	50	45.5	91	70-130
124-48-1	Dibromochloromethane	50	50.9	102	70-130
106-93-4	1,2-Dibromoethane	50	48.1	96	70-130
95-50-1	1,2-Dichlorobenzene	50	49.5	99	70-130
541-73-1	1,3-Dichlorobenzene	50	49.2	98	70-130
106-46-7	1,4-Dichlorobenzene	50	50.2	100	70-130
75-71-8	Dichlorodifluoromethane	50	20.1	40* a	70-130
75-34-3	1,1-Dichloroethane	50	46.5	93	70-130
107-06-2	1,2-Dichloroethane	50	45.6	91	70-130
75-35-4	1,1-Dichloroethene	50	42.0	84	70-130
156-59-2	cis-1,2-Dichloroethene	50	48.6	97	70-130
156-60-5	trans-1,2-Dichloroethene	50	47.1	94	70-130
78-87-5	1,2-Dichloropropane	50	47.9	96	70-130
142-28-9	1,3-Dichloropropane	50	47.7	95	70-130
594-20-7	2,2-Dichloropropane	50	58.7	117	70-130
563-58-6	1,1-Dichloropropene	50	46.7	93	70-130
10061-01-5	cis-1,3-Dichloropropene	50	48.7	97	70-130

Blank Spike Summary

Page 2 of 3

Job Number: M83766
Account: LEA Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG3684-BS	G91111.D	1	06/25/09	EL	n/a	n/a	MSG3684

The QC reported here applies to the following samples:

Method: SW846 8260B

M83766-1, M83766-3, M83766-5, M83766-7, M83766-11, M83766-13, M83766-15, M83766-17

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	50	50.2	100	70-130
100-41-4	Ethylbenzene	50	50.1	100	70-130
76-13-1	Freon 113	50	45.6	91	70-130
87-68-3	Hexachlorobutadiene	50	51.2	102	70-130
591-78-6	2-Hexanone	50	47.0	94	70-130
98-82-8	Isopropylbenzene	50	50.4	101	70-130
99-87-6	p-Isopropyltoluene	50	50.3	101	70-130
1634-04-4	Methyl Tert Butyl Ether	50	46.7	93	70-130
108-10-1	4-Methyl-2-pentanone (MIBK)	50	50.9	102	70-130
74-95-3	Methylene bromide	50	47.8	96	70-130
75-09-2	Methylene chloride	50	44.6	89	70-130
91-20-3	Naphthalene	50	47.7	95	70-130
103-65-1	n-Propylbenzene	50	51.7	103	70-130
100-42-5	Styrene	50	51.0	102	70-130
630-20-6	1,1,1,2-Tetrachloroethane	50	47.8	96	70-130
79-34-5	1,1,2,2-Tetrachloroethane	50	47.6	95	70-130
127-18-4	Tetrachloroethene	50	49.2	98	70-130
109-99-9	Tetrahydrofuran	50	44.1	88	70-130
108-88-3	Toluene	50	48.9	98	70-130
110-57-6	Trans-1,4-Dichloro-2-Butene	50	53.4	107	70-130
87-61-6	1,2,3-Trichlorobenzene	50	48.4	97	70-130
120-82-1	1,2,4-Trichlorobenzene	50	49.8	100	70-130
71-55-6	1,1,1-Trichloroethane	50	47.3	95	70-130
79-00-5	1,1,2-Trichloroethane	50	47.8	96	70-130
79-01-6	Trichloroethene	50	47.8	96	70-130
75-69-4	Trichlorofluoromethane	50	40.0	80	70-130
96-18-4	1,2,3-Trichloropropane	50	50.8	102	70-130
95-63-6	1,2,4-Trimethylbenzene	50	51.0	102	70-130
108-67-8	1,3,5-Trimethylbenzene	50	50.5	101	70-130
75-01-4	Vinyl chloride	50	40.3	81	70-130
	m,p-Xylene	100	104	104	70-130
95-47-6	o-Xylene	50	52.1	104	70-130

Blank Spike Summary

Page 3 of 3

Job Number: M83766
Account: LEA Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG3684-BS	G91111.D	1	06/25/09	EL	n/a	n/a	MSG3684

The QC reported here applies to the following samples:

Method: SW846 8260B

M83766-1, M83766-3, M83766-5, M83766-7, M83766-11, M83766-13, M83766-15, M83766-17

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	100%	70-130%
2037-26-5	Toluene-D8	99%	70-130%
460-00-4	4-Bromofluorobenzene	99%	70-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 3

Job Number: M83766

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG3686-BS	G91160.D	1	06/26/09	EL	n/a	n/a	MSG3686
MSG3686-BSD	G91161.D	1	06/26/09	EL	n/a	n/a	MSG3686

The QC reported here applies to the following samples:

Method: SW846 8260B

M83766-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	50	55.9	112	57.6	115	3	70-130/25
107-13-1	Acrylonitrile	250	253	101	255	102	1	70-130/25
71-43-2	Benzene	50	48.0	96	48.8	98	2	70-130/25
108-86-1	Bromobenzene	50	51.4	103	51.4	103	0	70-130/25
75-27-4	Bromodichloromethane	50	52.0	104	52.3	105	1	70-130/25
75-25-2	Bromoform	50	52.1	104	52.4	105	1	70-130/25
74-83-9	Bromomethane	50	53.5	107	53.8	108	1	70-130/25
78-93-3	2-Butanone (MEK)	50	49.0	98	48.0	96	2	70-130/25
104-51-8	n-Butylbenzene	50	53.3	107	53.3	107	0	70-130/25
135-98-8	sec-Butylbenzene	50	53.2	106	53.7	107	1	70-130/25
98-06-6	tert-Butylbenzene	50	52.8	106	53.1	106	1	70-130/25
75-15-0	Carbon disulfide	50	56.7	113	57.1	114	1	70-130/25
56-23-5	Carbon tetrachloride	50	50.4	101	51.9	104	3	70-130/25
108-90-7	Chlorobenzene	50	50.0	100	50.1	100	0	70-130/25
75-00-3	Chloroethane	50	55.7	111	56.2	112	1	70-130/25
67-66-3	Chloroform	50	48.9	98	49.5	99	1	70-130/25
74-87-3	Chloromethane	50	54.0	108	54.0	108	0	70-130/25
95-49-8	o-Chlorotoluene	50	51.2	102	51.4	103	0	70-130/25
106-43-4	p-Chlorotoluene	50	50.7	101	51.2	102	1	70-130/25
96-12-8	1,2-Dibromo-3-chloropropane	50	47.2	94	44.0	88	7	70-130/25
124-48-1	Dibromochloromethane	50	52.5	105	52.6	105	0	70-130/25
106-93-4	1,2-Dibromoethane	50	49.7	99	49.2	98	1	70-130/25
95-50-1	1,2-Dichlorobenzene	50	50.8	102	51.4	103	1	70-130/25
541-73-1	1,3-Dichlorobenzene	50	50.8	102	51.3	103	1	70-130/25
106-46-7	1,4-Dichlorobenzene	50	51.8	104	51.9	104	0	70-130/25
75-71-8	Dichlorodifluoromethane	50	70.2	140* a	71.6	143* a	2	70-130/25
75-34-3	1,1-Dichloroethane	50	49.1	98	49.6	99	1	70-130/25
107-06-2	1,2-Dichloroethane	50	47.6	95	48.0	96	1	70-130/25
75-35-4	1,1-Dichloroethene	50	50.5	101	50.1	100	1	70-130/25
156-59-2	cis-1,2-Dichloroethene	50	50.8	102	50.4	101	1	70-130/25
156-60-5	trans-1,2-Dichloroethene	50	51.0	102	52.5	105	3	70-130/25
78-87-5	1,2-Dichloropropane	50	49.5	99	49.9	100	1	70-130/25
142-28-9	1,3-Dichloropropane	50	49.0	98	49.0	98	0	70-130/25
594-20-7	2,2-Dichloropropane	50	63.5	127	63.5	127	0	70-130/25
563-58-6	1,1-Dichloropropene	50	50.6	101	51.3	103	1	70-130/25
10061-01-5	cis-1,3-Dichloropropene	50	50.2	100	51.0	102	2	70-130/25

Blank Spike/Blank Spike Duplicate Summary

Page 2 of 3

Job Number: M83766**Account:** LEA Loureiro Eng. Associates**Project:** UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG3686-BS	G91160.D	1	06/26/09	EL	n/a	n/a	MSG3686
MSG3686-BSD	G91161.D	1	06/26/09	EL	n/a	n/a	MSG3686

The QC reported here applies to the following samples:**Method:** SW846 8260B

M83766-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	50	51.4	103	52.1	104	1	70-130/25
100-41-4	Ethylbenzene	50	52.4	105	52.4	105	0	70-130/25
76-13-1	Freon 113	50	55.0	110	55.6	111	1	70-130/25
87-68-3	Hexachlorobutadiene	50	53.6	107	52.9	106	1	70-130/25
591-78-6	2-Hexanone	50	47.0	94	46.9	94	0	70-130/25
98-82-8	Isopropylbenzene	50	52.8	106	53.5	107	1	70-130/25
99-87-6	p-Isopropyltoluene	50	51.9	104	52.3	105	1	70-130/25
1634-04-4	Methyl Tert Butyl Ether	50	49.5	99	49.9	100	1	70-130/25
108-10-1	4-Methyl-2-pentanone (MIBK)	50	51.4	103	51.5	103	0	70-130/25
74-95-3	Methylene bromide	50	49.1	98	50.0	100	2	70-130/25
75-09-2	Methylene chloride	50	47.5	95	47.9	96	1	70-130/25
91-20-3	Naphthalene	50	48.4	97	47.3	95	2	70-130/25
103-65-1	n-Propylbenzene	50	53.8	108	54.2	108	1	70-130/25
100-42-5	Styrene	50	52.7	105	52.9	106	0	70-130/25
630-20-6	1,1,1,2-Tetrachloroethane	50	49.2	98	50.1	100	2	70-130/25
79-34-5	1,1,2,2-Tetrachloroethane	50	48.6	97	49.2	98	1	70-130/25
127-18-4	Tetrachloroethene	50	52.6	105	52.4	105	0	70-130/25
109-99-9	Tetrahydrofuran	50	48.4	97	48.3	97	0	70-130/25
108-88-3	Toluene	50	51.2	102	51.6	103	1	70-130/25
110-57-6	Trans-1,4-Dichloro-2-Butene	50	54.2	108	53.0	106	2	70-130/25
87-61-6	1,2,3-Trichlorobenzene	50	49.6	99	49.5	99	0	70-130/25
120-82-1	1,2,4-Trichlorobenzene	50	51.1	102	51.2	102	0	70-130/25
71-55-6	1,1,1-Trichloroethane	50	50.8	102	51.1	102	1	70-130/25
79-00-5	1,1,2-Trichloroethane	50	48.7	97	49.7	99	2	70-130/25
79-01-6	Trichloroethene	50	50.6	101	51.4	103	2	70-130/25
75-69-4	Trichlorofluoromethane	50	52.6	105	53.1	106	1	70-130/25
96-18-4	1,2,3-Trichloropropane	50	51.5	103	52.2	104	1	70-130/25
95-63-6	1,2,4-Trimethylbenzene	50	53.3	107	53.5	107	0	70-130/25
108-67-8	1,3,5-Trimethylbenzene	50	53.1	106	53.6	107	1	70-130/25
75-01-4	Vinyl chloride	50	62.1	124	62.5	125	1	70-130/25
	m,p-Xylene	100	108	108	109	109	1	70-130/25
95-47-6	o-Xylene	50	53.9	108	54.2	108	1	70-130/25

Blank Spike/Blank Spike Duplicate Summary

Page 3 of 3

Job Number: M83766

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG3686-BS	G91160.D	1	06/26/09	EL	n/a	n/a	MSG3686
MSG3686-BSD	G91161.D	1	06/26/09	EL	n/a	n/a	MSG3686

The QC reported here applies to the following samples:

Method: SW846 8260B

M83766-9

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	99%	98%	70-130%
2037-26-5	Toluene-D8	100%	101%	70-130%
460-00-4	4-Bromofluorobenzene	100%	100%	70-130%

(a) Outside control limits. Associated samples are non-detect for this compound.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: M83766**Account:** LEA Loureiro Eng. Associates**Project:** UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M83761-7MS	G91132.D	5	06/25/09	EL	n/a	n/a	MSG3684
M83761-7MSD	G91133.D	5	06/25/09	EL	n/a	n/a	MSG3684
M83761-7	G91120.D	1	06/25/09	EL	n/a	n/a	MSG3684

The QC reported here applies to the following samples:**Method:** SW846 8260B

M83766-1, M83766-3, M83766-5, M83766-7, M83766-11, M83766-13, M83766-15, M83766-17

CAS No.	Compound	M83761-7 ug/l	Spike Q	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	250	270	108	271	108	0	70-130/30
107-13-1	Acrylonitrile	ND	1250	1340	107	1320	106	2	70-130/30
71-43-2	Benzene	ND	250	240	96	243	97	1	70-130/30
108-86-1	Bromobenzene	ND	250	231	92	243	97	5	70-130/30
75-27-4	Bromodichloromethane	ND	250	250	100	254	102	2	70-130/30
75-25-2	Bromoform	ND	250	222	89	223	89	0	70-130/30
74-83-9	Bromomethane	ND	250	274	110	276	110	1	70-130/30
78-93-3	2-Butanone (MEK)	ND	250	251	100	247	99	2	70-130/30
104-51-8	n-Butylbenzene	ND	250	246	98	255	102	4	70-130/30
135-98-8	sec-Butylbenzene	ND	250	250	100	259	104	4	70-130/30
98-06-6	tert-Butylbenzene	ND	250	248	99	257	103	4	70-130/30
75-15-0	Carbon disulfide	ND	250	224	90	230	92	3	70-130/30
56-23-5	Carbon tetrachloride	ND	250	244	98	251	100	3	70-130/30
108-90-7	Chlorobenzene	ND	250	236	94	242	97	3	70-130/30
75-00-3	Chloroethane	ND	250	280	112	291	116	4	70-130/30
67-66-3	Chloroform	0.70	250	256	102	255	102	0	70-130/30
74-87-3	Chloromethane	ND	250	326	130	313	125	4	70-130/30
95-49-8	o-Chlorotoluene	ND	250	240	96	248	99	3	70-130/30
106-43-4	p-Chlorotoluene	ND	250	236	94	244	98	3	70-130/30
96-12-8	1,2-Dibromo-3-chloropropane	ND	250	221	88	229	92	4	70-130/30
124-48-1	Dibromochloromethane	ND	250	239	96	238	95	0	70-130/30
106-93-4	1,2-Dibromoethane	ND	250	235	94	239	96	2	70-130/30
95-50-1	1,2-Dichlorobenzene	ND	250	238	95	241	96	1	70-130/30
541-73-1	1,3-Dichlorobenzene	ND	250	236	94	243	97	3	70-130/30
106-46-7	1,4-Dichlorobenzene	ND	250	242	97	248	99	2	70-130/30
75-71-8	Dichlorodifluoromethane	ND	250	408	163* a	394	158* a	3	70-130/30
75-34-3	1,1-Dichloroethane	ND	250	253	101	253	101	0	70-130/30
107-06-2	1,2-Dichloroethane	ND	250	241	96	243	97	1	70-130/30
75-35-4	1,1-Dichloroethene	ND	250	256	102	257	103	0	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND	250	258	103	262	105	2	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND	250	257	103	263	105	2	70-130/30
78-87-5	1,2-Dichloropropane	ND	250	247	99	250	100	1	70-130/30
142-28-9	1,3-Dichloropropane	ND	250	237	95	239	96	1	70-130/30
594-20-7	2,2-Dichloropropane	ND	250	287	115	290	116	1	70-130/30
563-58-6	1,1-Dichloropropene	ND	250	246	98	252	101	2	70-130/30
10061-01-5	cis-1,3-Dichloropropene	ND	250	234	94	237	95	1	70-130/30

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: M83766
Account: LEA Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M83761-7MS	G91132.D	5	06/25/09	EL	n/a	n/a	MSG3684
M83761-7MSD	G91133.D	5	06/25/09	EL	n/a	n/a	MSG3684
M83761-7	G91120.D	1	06/25/09	EL	n/a	n/a	MSG3684

The QC reported here applies to the following samples:

Method: SW846 8260B

M83766-1, M83766-3, M83766-5, M83766-7, M83766-11, M83766-13, M83766-15, M83766-17

CAS No.	Compound	M83761-7 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	ND	250	242	97	241	96	0	70-130/30
100-41-4	Ethylbenzene	ND	250	249	100	252	101	1	70-130/30
76-13-1	Freon 113	ND	250	277	111	283	113	2	70-130/30
87-68-3	Hexachlorobutadiene	ND	250	230	92	238	95	3	70-130/30
591-78-6	2-Hexanone	ND	250	237	95	236	94	0	70-130/30
98-82-8	Isopropylbenzene	ND	250	244	98	255	102	4	70-130/30
99-87-6	p-Isopropyltoluene	ND	250	242	97	252	101	4	70-130/30
1634-04-4	Methyl Tert Butyl Ether	ND	250	249	100	253	101	2	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	250	264	106	267	107	1	70-130/30
74-95-3	Methylene bromide	ND	250	248	99	249	100	0	70-130/30
75-09-2	Methylene chloride	ND	250	246	98	248	99	1	70-130/30
91-20-3	Naphthalene	ND	250	212	85	227	91	7	70-130/30
103-65-1	n-Propylbenzene	ND	250	251	100	263	105	5	70-130/30
100-42-5	Styrene	ND	250	245	98	251	100	2	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND	250	234	94	238	95	2	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND	250	238	95	244	98	2	70-130/30
127-18-4	Tetrachloroethene	ND	250	237	95	247	99	4	70-130/30
109-99-9	Tetrahydrofuran	ND	250	247	99	256	102	4	70-130/30
108-88-3	Toluene	ND	250	252	101	256	102	2	70-130/30
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	250	242	97	233	93	4	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND	250	218	87	225	90	3	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND	250	225	90	231	92	3	70-130/30
71-55-6	1,1,1-Trichloroethane	ND	250	253	101	258	103	2	70-130/30
79-00-5	1,1,2-Trichloroethane	ND	250	250	100	247	99	1	70-130/30
79-01-6	Trichloroethene	3.2	250	251	99	255	101	2	70-130/30
75-69-4	Trichlorofluoromethane	ND	250	264	106	268	107	2	70-130/30
96-18-4	1,2,3-Trichloropropane	ND	250	237	95	245	98	3	70-130/30
95-63-6	1,2,4-Trimethylbenzene	ND	250	246	98	254	102	3	70-130/30
108-67-8	1,3,5-Trimethylbenzene	ND	250	246	98	255	102	4	70-130/30
75-01-4	Vinyl chloride	ND	250	349	140* b	346	138* b	1	70-130/30
	m,p-Xylene	ND	500	508	102	522	104	3	70-130/30
95-47-6	o-Xylene	ND	250	259	104	261	104	1	70-130/30

Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: M83766

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M83761-7MS	G91132.D	5	06/25/09	EL	n/a	n/a	MSG3684
M83761-7MSD	G91133.D	5	06/25/09	EL	n/a	n/a	MSG3684
M83761-7	G91120.D	1	06/25/09	EL	n/a	n/a	MSG3684

The QC reported here applies to the following samples:

Method: SW846 8260B

M83766-1, M83766-3, M83766-5, M83766-7, M83766-11, M83766-13, M83766-15, M83766-17

CAS No.	Surrogate Recoveries	MS	MSD	M83761-7	Limits
1868-53-7	Dibromofluoromethane	105%	104%	106%	70-130%
2037-26-5	Toluene-D8	102%	101%	101%	70-130%
460-00-4	4-Bromofluorobenzene	95%	99%	100%	70-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

(b) Outside control limits due to possible matrix interference. Refer to Blank Spike.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: M83766

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M83755-7MS	G91183.D	1	06/26/09	EL	n/a	n/a	MSG3686
M83755-7MSD	G91184.D	1	06/26/09	EL	n/a	n/a	MSG3686
M83755-7	G91171.D	1	06/26/09	EL	n/a	n/a	MSG3686

The QC reported here applies to the following samples:

Method: SW846 8260B

M83766-9

CAS No.	Compound	M83755-7 ug/l	Spike Q	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	50	50.8	102	49.8	100	2	70-130/30
107-13-1	Acrylonitrile	ND	250	249	100	248	99	0	70-130/30
71-43-2	Benzene	ND	50	46.9	94	46.1	92	2	70-130/30
108-86-1	Bromobenzene	ND	50	45.4	91	46.2	92	2	70-130/30
75-27-4	Bromodichloromethane	ND	50	49.9	100	48.6	97	3	70-130/30
75-25-2	Bromoform	ND	50	40.6	81	39.9	80	2	70-130/30
74-83-9	Bromomethane	ND	50	54.2	108	54.2	108	0	70-130/30
78-93-3	2-Butanone (MEK)	ND	50	48.7	97	49.8	100	2	70-130/30
104-51-8	n-Butylbenzene	ND	50	47.6	95	47.1	94	1	70-130/30
135-98-8	sec-Butylbenzene	ND	50	49.0	98	49.3	99	1	70-130/30
98-06-6	tert-Butylbenzene	ND	50	47.7	95	48.6	97	2	70-130/30
75-15-0	Carbon disulfide	ND	50	47.8	96	47.9	96	0	70-130/30
56-23-5	Carbon tetrachloride	ND	50	48.0	96	47.3	95	1	70-130/30
108-90-7	Chlorobenzene	ND	50	46.6	93	46.4	93	0	70-130/30
75-00-3	Chloroethane	ND	50	55.1	110	55.7	111	1	70-130/30
67-66-3	Chloroform	ND	50	49.2	98	48.9	98	1	70-130/30
74-87-3	Chloromethane	ND	50	65.6	131* a	59.9	120	9	70-130/30
95-49-8	o-Chlorotoluene	ND	50	46.2	92	47.0	94	2	70-130/30
106-43-4	p-Chlorotoluene	ND	50	46.0	92	46.2	92	0	70-130/30
96-12-8	1,2-Dibromo-3-chloropropane	ND	50	40.7	81	41.2	82	1	70-130/30
124-48-1	Dibromochloromethane	ND	50	45.2	90	44.8	90	1	70-130/30
106-93-4	1,2-Dibromoethane	ND	50	46.4	93	45.4	91	2	70-130/30
95-50-1	1,2-Dichlorobenzene	ND	50	46.4	93	46.7	93	1	70-130/30
541-73-1	1,3-Dichlorobenzene	ND	50	46.0	92	46.3	93	1	70-130/30
106-46-7	1,4-Dichlorobenzene	ND	50	47.7	95	47.8	96	0	70-130/30
75-71-8	Dichlorodifluoromethane	ND	50	80.7	161* b	76.3	153* b	6	70-130/30
75-34-3	1,1-Dichloroethane	ND	50	49.0	98	48.5	97	1	70-130/30
107-06-2	1,2-Dichloroethane	ND	50	47.5	95	46.0	92	3	70-130/30
75-35-4	1,1-Dichloroethene	ND	50	48.7	97	48.2	96	1	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND	50	50.2	100	49.8	100	1	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND	50	49.8	100	50.2	100	1	70-130/30
78-87-5	1,2-Dichloropropane	ND	50	48.9	98	47.7	95	2	70-130/30
142-28-9	1,3-Dichloropropane	ND	50	45.8	92	45.5	91	1	70-130/30
594-20-7	2,2-Dichloropropane	ND	50	53.6	107	52.9	106	1	70-130/30
563-58-6	1,1-Dichloropropene	ND	50	47.7	95	47.4	95	1	70-130/30
10061-01-5	cis-1,3-Dichloropropene	ND	50	44.2	88	42.5	85	4	70-130/30

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: M83766
Account: LEA Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M83755-7MS	G91183.D	1	06/26/09	EL	n/a	n/a	MSG3686
M83755-7MSD	G91184.D	1	06/26/09	EL	n/a	n/a	MSG3686
M83755-7	G91171.D	1	06/26/09	EL	n/a	n/a	MSG3686

The QC reported here applies to the following samples:

Method: SW846 8260B

M83766-9

CAS No.	Compound	M83755-7 ug/l	Spike Q	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	ND	50	44.4	89	43.5	87	2	70-130/30
100-41-4	Ethylbenzene	ND	50	48.0	96	48.0	96	0	70-130/30
76-13-1	Freon 113	ND	50	53.3	107	53.6	107	1	70-130/30
87-68-3	Hexachlorobutadiene	ND	50	45.1	90	44.6	89	1	70-130/30
591-78-6	2-Hexanone	ND	50	45.8	92	45.6	91	0	70-130/30
98-82-8	Isopropylbenzene	ND	50	47.1	94	48.3	97	3	70-130/30
99-87-6	p-Isopropyltoluene	ND	50	47.1	94	46.9	94	0	70-130/30
1634-04-4	Methyl Tert Butyl Ether	ND	50	47.8	96	48.0	96	0	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	50	53.1	106	52.0	104	2	70-130/30
74-95-3	Methylene bromide	ND	50	49.6	99	47.4	95	5	70-130/30
75-09-2	Methylene chloride	ND	50	48.0	96	47.6	95	1	70-130/30
91-20-3	Naphthalene	ND	50	40.7	81	42.0	84	3	70-130/30
103-65-1	n-Propylbenzene	ND	50	48.8	98	49.0	98	0	70-130/30
100-42-5	Styrene	ND	50	43.7	87	43.0	86	2	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND	50	46.1	92	46.0	92	0	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND	50	46.0	92	46.2	92	0	70-130/30
127-18-4	Tetrachloroethene	ND	50	47.3	95	46.5	93	2	70-130/30
109-99-9	Tetrahydrofuran	ND	50	49.4	99	48.4	97	2	70-130/30
108-88-3	Toluene	ND	50	49.4	99	48.4	97	2	70-130/30
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	50	40.5	81	38.1	76	6	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND	50	41.8	84	42.1	84	1	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND	50	43.4	87	43.1	86	1	70-130/30
71-55-6	1,1,1-Trichloroethane	ND	50	49.2	98	49.2	98	0	70-130/30
79-00-5	1,1,2-Trichloroethane	ND	50	48.4	97	48.0	96	1	70-130/30
79-01-6	Trichloroethene	ND	50	48.9	98	48.2	96	1	70-130/30
75-69-4	Trichlorofluoromethane	ND	50	50.0	100	50.8	102	2	70-130/30
96-18-4	1,2,3-Trichloropropane	ND	50	44.1	88	44.6	89	1	70-130/30
95-63-6	1,2,4-Trimethylbenzene	ND	50	46.8	94	47.0	94	0	70-130/30
108-67-8	1,3,5-Trimethylbenzene	ND	50	46.9	94	47.4	95	1	70-130/30
75-01-4	Vinyl chloride	ND	50	69.9	140* a	64.3	129	8	70-130/30
	m,p-Xylene	ND	100	98.7	99	98.6	99	0	70-130/30
95-47-6	o-Xylene	ND	50	50.4	101	49.3	99	2	70-130/30

Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: M83766

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M83755-7MS	G91183.D	1	06/26/09	EL	n/a	n/a	MSG3686
M83755-7MSD	G91184.D	1	06/26/09	EL	n/a	n/a	MSG3686
M83755-7	G91171.D	1	06/26/09	EL	n/a	n/a	MSG3686

The QC reported here applies to the following samples:

Method: SW846 8260B

M83766-9

CAS No.	Surrogate Recoveries	MS	MSD	M83755-7	Limits
1868-53-7	Dibromofluoromethane	104%	103%	100%	70-130%
2037-26-5	Toluene-D8	102%	101%	100%	70-130%
460-00-4	4-Bromofluorobenzene	94%	97%	100%	70-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.

(b) Outside control limits. Associated samples are non-detect for this compound.

Volatile Internal Standard Area Summary

Page 1 of 1

Job Number: M83766
Account: LEA Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

Check Std: MSG3684-CC3682
Lab File ID: G91109.D
Instrument ID: GCMSG
Injection Date: 06/25/09
Injection Time: 10:20
Method: SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	165880	9.04	274570	9.91	163491	13.17	135821	15.73	88119	6.62
Upper Limit ^a	331760	9.54	549140	10.41	326982	13.67	271642	16.23	176238	7.12
Lower Limit ^b	82940	8.54	137285	9.41	81746	12.67	67911	15.23	44060	6.12

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSG3684-BS	174155	9.04	286124	9.92	159043	13.17	137420	15.73	91963	6.62
MSG3684-MB	165054	9.04	270265	9.91	144521	13.17	119694	15.73	86242	6.63
ZZZZZZ	158443	9.04	259209	9.91	139629	13.17	113743	15.73	67584	6.63
ZZZZZZ	157705	9.04	259159	9.92	137233	13.17	111852	15.73	77596	6.63
ZZZZZZ	156417	9.04	253695	9.91	136882	13.17	112775	15.73	77763	6.63
ZZZZZZ	151690	9.04	249345	9.91	133191	13.17	111656	15.73	67859	6.63
ZZZZZZ	149362	9.04	244480	9.91	132526	13.17	108519	15.73	75633	6.63
ZZZZZZ	147333	9.04	242784	9.91	131469	13.17	108235	15.73	73177	6.63
M83761-7	144330	9.04	238075	9.92	129188	13.17	105630	15.73	60703	6.67
ZZZZZZ	143607	9.05	237952	9.92	127880	13.17	105439	15.73	68980	6.64
ZZZZZZ	143825	9.04	237948	9.91	126888	13.17	103473	15.73	70931	6.63
M83766-1	144041	9.04	235811	9.91	127625	13.17	104246	15.73	71782	6.62
M83766-3	142008	9.05	234084	9.92	126642	13.17	102961	15.73	70876	6.63
M83766-5	142060	9.05	234060	9.92	125344	13.17	102009	15.73	75170	6.63
M83766-7	142366	9.04	235691	9.91	125633	13.17	103260	15.73	72791	6.63
M83766-11	140382	9.05	232196	9.91	124411	13.17	100963	15.74	76579	6.63
M83766-13	139175	9.04	227283	9.92	124934	13.17	101142	15.73	77798	6.64
M83766-15	137093	9.05	227999	9.92	123459	13.17	98161	15.73	70785	6.63
M83766-17	135806	9.04	225844	9.92	122720	13.17	98794	15.73	72300	6.63
M83761-7MS	145655	9.04	241808	9.91	138401	13.17	122976	15.73	70702	6.62
M83761-7MSD	156065	9.04	258128	9.92	146779	13.17	125920	15.73	81202	6.62

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.

(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Page 1 of 1

Job Number: M83766
Account: LEA Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

Check Std: MSG3686-CC3682
Lab File ID: G91159.D
Instrument ID: GCMSG
Injection Date: 06/26/09
Injection Time: 10:57
Method: SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	178810	9.04	293317	9.91	171764	13.17	143942	15.73	92406	6.61
Upper Limit ^a	357620	9.54	586634	10.41	343528	13.67	287884	16.23	184812	7.11
Lower Limit ^b	89405	8.54	146659	9.41	85882	12.67	71971	15.23	46203	6.11

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSG3686-BS	180439	9.04	294898	9.91	163950	13.17	141262	15.73	95578	6.62
MSG3686-BSD	180974	9.04	293981	9.91	164389	13.17	140386	15.73	92847	6.62
MSG3686-MB	172827	9.04	277034	9.92	149172	13.17	121401	15.73	97496	6.64
ZZZZZZ	165683	9.04	270079	9.92	144452	13.17	118869	15.73	81226	6.63
ZZZZZZ	160074	9.05	261632	9.92	141559	13.17	115195	15.74	83849	6.64
ZZZZZZ	157146	9.05	256636	9.92	137324	13.17	113012	15.73	80361	6.63
ZZZZZZ	152918	9.04	248580	9.92	134605	13.17	110845	15.74	81438	6.63
ZZZZZZ	151945	9.04	249604	9.91	136001	13.17	120371	15.73	81665	6.62
ZZZZZZ	167695	9.04	272528	9.91	149359	13.18	124559	15.73	92639	6.63
ZZZZZZ	163588	9.04	265464	9.92	143792	13.17	118923	15.73	84219	6.64
M83755-7	161115	9.05	260411	9.92	140405	13.17	115666	15.73	88825	6.64
ZZZZZZ	157081	9.04	256086	9.92	137673	13.17	112964	15.74	82767	6.63
ZZZZZZ	152761	9.05	248468	9.91	133821	13.17	107804	15.73	81842	6.64
ZZZZZZ	150017	9.04	246980	9.92	132102	13.17	108356	15.73	83586	6.64
ZZZZZZ	150225	9.04	245393	9.91	131568	13.17	104777	15.73	84369	6.63
ZZZZZZ	144080	9.05	237985	9.92	129929	13.17	103930	15.74	85205	6.63
ZZZZZZ	142326	9.04	233204	9.91	125982	13.17	101172	15.74	81497	6.64
ZZZZZZ	141646	9.04	230951	9.92	125758	13.17	100160	15.74	81488	6.64
ZZZZZZ	139827	9.04	229623	9.91	124686	13.17	100349	15.73	81069	6.64
M83766-9	138040	9.04	228860	9.92	123236	13.17	101751	15.73	78263	6.65
ZZZZZZ	138635	9.04	226595	9.92	125162	13.17	99188	15.73	74480	6.63
ZZZZZZ	134049	9.04	223356	9.91	123029	13.17	101778	15.73	69021	6.65
M83755-7MS	142623	9.04	235185	9.92	136763	13.17	121957	15.73	73668	6.62
M83755-7MSD	155661	9.04	258300	9.91	147225	13.17	127254	15.73	83807	6.62

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Page 1 of 1

Job Number: M83766

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Method: SW846 8260B

Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
M83766-1	G91123.D	104.0	102.0	100.0
M83766-3	G91124.D	105.0	101.0	100.0
M83766-5	G91125.D	106.0	100.0	100.0
M83766-7	G91126.D	105.0	101.0	100.0
M83766-9	G91180.D	106.0	101.0	100.0
M83766-11	G91128.D	106.0	101.0	101.0
M83766-13	G91129.D	105.0	102.0	99.0
M83766-15	G91130.D	107.0	101.0	102.0
M83766-17	G91131.D	107.0	101.0	100.0
M83755-7MS	G91183.D	104.0	102.0	94.0
M83755-7MSD	G91184.D	103.0	101.0	97.0
M83761-7MS	G91132.D	105.0	102.0	95.0
M83761-7MSD	G91133.D	104.0	101.0	99.0
MSG3684-BS	G91111.D	100.0	99.0	99.0
MSG3684-MB	G91113.D	101.0	99.0	101.0
MSG3686-BS	G91160.D	99.0	100.0	100.0
MSG3686-BSD	G91161.D	98.0	101.0	100.0
MSG3686-MB	G91163.D	98.0	99.0	103.0

Surrogate Compounds

Recovery Limits

S1 = Dibromofluoromethane

70-130%

S2 = Toluene-D8

70-130%

S3 = 4-Bromofluorobenzene

70-130%



GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Page 1 of 1

Job Number: M83766
Account: LEA Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP18815-MB	BC28130.D	1	06/25/09	WZ	06/25/09	OP18815	GBC1527

The QC reported here applies to the following samples:

Method: CT-ETPH 7/06

M83766-1, M83766-3, M83766-5, M83766-7, M83766-11, M83766-13, M83766-15, M83766-17

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	ND	0.080	mg/l	

CAS No.	Surrogate Recoveries	Limits
3386-33-2	1-Chlorooctadecane	80% 50-149%

Method Blank Summary

Page 1 of 1

Job Number: M83766
Account: LEA Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP18816-MB	BB26405.D	1	06/26/09	CZ	06/26/09	OP18816	GBB1083

The QC reported here applies to the following samples:

Method: SW846 8082

M83766-1, M83766-3, M83766-5, M83766-7, M83766-11, M83766-13, M83766-15, M83766-17

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	109% 30-150%
877-09-8	Tetrachloro-m-xylene	115% 30-150%
2051-24-3	Decachlorobiphenyl	94% 30-150%
2051-24-3	Decachlorobiphenyl	81% 30-150%

Blank Spike Summary

Page 1 of 1

Job Number: M83766

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP18815-BS	BC28131.D	1	06/25/09	WZ	06/25/09	OP18815	GBC1527

The QC reported here applies to the following samples:

Method: CT-ETPH 7/06

M83766-1, M83766-3, M83766-5, M83766-7, M83766-11, M83766-13, M83766-15, M83766-17

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	CT-DRO (C9-C36)	0.7	0.736	105	60-120

CAS No.	Surrogate Recoveries	BSP	Limits
3386-33-2	1-Chlorooctadecane	73%	50-149%

6.2.1

6

Blank Spike Summary

Page 1 of 1

Job Number: M83766

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP18816-BS	BB26406.D	1	06/26/09	CZ	06/26/09	OP18816	GBB1083

The QC reported here applies to the following samples:

Method: SW846 8082

M83766-1, M83766-3, M83766-5, M83766-7, M83766-11, M83766-13, M83766-15, M83766-17

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
12674-11-2	Aroclor 1016	2	2.2	110	40-140
11104-28-2	Aroclor 1221		ND		40-140
11141-16-5	Aroclor 1232		ND		40-140
53469-21-9	Aroclor 1242		ND		40-140
12672-29-6	Aroclor 1248		ND		40-140
11097-69-1	Aroclor 1254		ND		40-140
11096-82-5	Aroclor 1260	2	2.4	120	40-140
37324-23-5	Aroclor 1262		ND		40-140
11100-14-4	Aroclor 1268		ND		40-140

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	137%	30-150%
877-09-8	Tetrachloro-m-xylene	135%	30-150%
2051-24-3	Decachlorobiphenyl	101%	30-150%
2051-24-3	Decachlorobiphenyl	84%	30-150%

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: M83766

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP18815-MS	BC28132.D	1	06/25/09	WZ	06/25/09	OP18815	GBC1527
OP18815-MSD	BC28133.D	1	06/25/09	WZ	06/25/09	OP18815	GBC1527
M83755-22	BC28134.D	1	06/25/09	WZ	06/25/09	OP18815	GBC1527

The QC reported here applies to the following samples:

Method: CT-ETPH 7/06

M83766-1, M83766-3, M83766-5, M83766-7, M83766-11, M83766-13, M83766-15, M83766-17

CAS No.	Compound	M83755-22 mg/l	Spike Q	mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	CT-DRO (C9-C36)	0.0821	J	0.778	0.807	93	0.826	96	2	50-129/26

CAS No.	Surrogate Recoveries	MS	MSD	M83755-22	Limits
3386-33-2	1-Chlorooctadecane	102%	107%	109%	50-149%

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: M83766
Account: LEA Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP18816-MS	BB26407.D	1	06/26/09	CZ	06/26/09	OP18816	GBB1083
OP18816-MSD	BB26408.D	1	06/26/09	CZ	06/26/09	OP18816	GBB1083
M84041-9	BB26409.D	1	06/26/09	CZ	06/25/09	OP18816	GBB1083

The QC reported here applies to the following samples:

Method: SW846 8082

M83766-1, M83766-3, M83766-5, M83766-7, M83766-11, M83766-13, M83766-15, M83766-17

CAS No.	Compound	M84041-9 ug/l	Spike Q	ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND	2		2.3	115	2.4	120	4	40-140/50
11104-28-2	Aroclor 1221	ND			ND		ND		nc	40-140/50
11141-16-5	Aroclor 1232	ND			ND		ND		nc	40-140/50
53469-21-9	Aroclor 1242	ND			ND		ND		nc	40-140/50
12672-29-6	Aroclor 1248	ND			ND		ND		nc	40-140/50
11097-69-1	Aroclor 1254	ND			ND		ND		nc	40-140/50
11096-82-5	Aroclor 1260	ND	2		2.3	115	2.5	125	8	40-140/50
37324-23-5	Aroclor 1262	ND			ND		ND		nc	40-140/50
11100-14-4	Aroclor 1268	ND			ND		ND		nc	40-140/50

CAS No.	Surrogate Recoveries	MS	MSD	M84041-9	Limits
877-09-8	Tetrachloro-m-xylene	124%	117%	108%	30-150%
877-09-8	Tetrachloro-m-xylene	130%	123%	117%	30-150%
2051-24-3	Decachlorobiphenyl	98%	103%	107%	30-150%
2051-24-3	Decachlorobiphenyl	71%	82%	75%	30-150%

Semivolatile Surrogate Recovery Summary

Page 1 of 1

Job Number: M83766

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Method: CT-ETPH 7/06

Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a
M83766-1	BC28232.D	97.0
M83766-3	BC28233.D	120.0
M83766-5	BC28234.D	111.0
M83766-7	BC28235.D	79.0
M83766-11	BC28237.D	104.0
M83766-13	BC28238.D	100.0
M83766-15	BC28239.D	102.0
M83766-17	BC28240.D	107.0
OP18815-BS	BC28131.D	73.0
OP18815-MB	BC28130.D	80.0
OP18815-MS	BC28132.D	102.0
OP18815-MSD	BC28133.D	107.0

Surrogate Compounds	Recovery Limits
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S1 = 1-Chlorooctadecane	50-149%
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(a) Recovery from GC signal #1

6.4.1

6

Semivolatile Surrogate Recovery Summary

Page 1 of 1

Job Number: M83766

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Method: SW846 8082

Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S1 ^b	S2 ^a	S2 ^b
M83766-1	BB26443.D	95.0	96.0	114.0	90.0
M83766-3	BB26444.D	89.0	89.0	100.0	92.0
M83766-5	BB26445.D	91.0	95.0	112.0	114.0
M83766-7	BB26446.D	102.0	100.0	75.0	69.0
M83766-11	BB26447.D	100.0	103.0	117.0	99.0
M83766-13	BB26448.D	106.0	107.0	119.0	104.0
M83766-15	BB26450.D	107.0	102.0	108.0	90.0
M83766-17	BB26451.D	117.0	116.0	115.0	113.0
OP18816-BS	BB26406.D	137.0	135.0	101.0	84.0
OP18816-MB	BB26405.D	109.0	115.0	94.0	81.0
OP18816-MS	BB26407.D	124.0	130.0	98.0	71.0
OP18816-MSD	BB26408.D	117.0	123.0	103.0	82.0

Surrogate Compounds

Recovery Limits

S1 = Tetrachloro-m-xylene

30-150%

S2 = Decachlorobiphenyl

30-150%

(a) Recovery from GC signal #1

(b) Recovery from GC signal #2

6.4.2

6



IT'S ALL IN THE CHEMISTRY

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M83766
Account: LEA - Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

QC Batch ID: MP13688
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 06/22/09

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	27	40		
Antimony	6.0	1.4	1.6		
Arsenic	10	1	1.8	-1.4	<10
Barium	200	.57	1.1	0.90	<200
Beryllium	4.0	.15	.4		
Boron	100	.65	2.3		
Cadmium	4.0	.24	1.9	0.0	<4.0
Calcium	5000	7.6	15		
Chromium	10	.81	1.1	-0.40	<10
Cobalt	50	.25	.3		
Copper	25	2.2	4	3.5	<25
Gold	50	1.1	4.2		
Iron	100	3.7	13		
Lead	5.0	1.1	2.7	0.10	<5.0
Magnesium	5000	37	77		
Manganese	15	.12	1.1		
Molybdenum	100	.22	.8		
Nickel	40	.24	1.3	-0.10	<40
Palladium	50	2.2	4		
Platinum	50	9.3	13		
Potassium	5000	39	46		
Selenium	10	1.9	3.5	0.20	<10
Silicon	100	8.9	36		
Silver	5.0	.54	1.3	0.0	<5.0
Sodium	5000	61	160		
Strontium	10	.24	.3		
Thallium	10	1.2	1.3		
Tin	100	.65	1.3		
Titanium	50	.74	.8		
Tungsten	100	5.6	8		
Vanadium	30	.68	1.6		
Zinc	20	.74	1.5	0.0	<20

Associated samples MP13688: M83766-2, M83766-4, M83766-6, M83766-8, M83766-10, M83766-12, M83766-14, M83766-16

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M83766
Account: LEA - Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

QC Batch ID: MP13688
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

7.1.1

7

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M83766
 Account: LEA - Loureiro Eng. Associates
 Project: UTC:2009 Quarterly GW-F&H Buildings

QC Batch ID: MP13688
 Matrix Type: AQUEOUS

Methods: SW846 6010B
 Units: ug/l

Prep Date: 06/22/09 06/22/09

Metal	M83766-2 Original MS		Spikelot MPICP	% Rec	QC Limits	M83766-2 Original DUP		RPD	QC Limits
Aluminum									
Antimony	anr								
Arsenic	0.0	520	500	104.0	75-125	0.0	0.0	NC	0-20
Barium	65.8	2040	2000	98.7	75-125	65.8	66.8	1.5	0-20
Beryllium	anr								
Boron									
Cadmium	0.0	518	500	103.6	75-125	0.0	0.30	200.0(a)	0-20
Calcium									
Chromium	0.0	494	500	98.8	75-125	0.0	0.0	NC	0-20
Cobalt									
Copper	0.0	508	500	101.6	75-125	0.0	0.0	NC	0-20
Gold									
Iron	anr								
Lead	0.0	1010	1000	101.0	75-125	0.0	0.0	NC	0-20
Magnesium									
Manganese	anr								
Molybdenum									
Nickel	0.50	497	500	99.3	75-125	0.50	0.70	33.3 (a)	0-20
Palladium									
Platinum									
Potassium									
Selenium	0.0	531	500	106.2	75-125	0.0	0.0	NC	0-20
Silicon									
Silver	0.0	204	200	102.0	75-125	0.0	0.0	NC	0-20
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Tungsten									
Vanadium	anr								
Zinc	6.9	512	500	101.0	75-125	6.9	6.8	1.5	0-20

Associated samples MP13688: M83766-2, M83766-4, M83766-6, M83766-8, M83766-10, M83766-12, M83766-14, M83766-16

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M83766
Account: LEA - Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

QC Batch ID: MP13688
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) RPD acceptable due to low duplicate and sample concentrations.

7.1.2

7

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M83766
 Account: LEA - Loureiro Eng. Associates
 Project: UTC:2009 Quarterly GW-F&H Buildings

QC Batch ID: MP13688
 Matrix Type: AQUEOUS

Methods: SW846 6010B
 Units: ug/l

Prep Date: 06/22/09

06/22/09

Metal	BSP Result	Spikelot MPICP	% Rec	QC Limits	BSD Result	Spikelot MPICP	% Rec	BSD RPD	QC Limit
Aluminum									
Antimony	anr								
Arsenic	520	500	104.0	80-120	523	500	104.6	0.6	20
Barium	2020	2000	101.0	80-120	2030	2000	101.5	0.5	20
Beryllium	anr								
Boron									
Cadmium	519	500	103.8	80-120	534	500	106.8	2.8	20
Calcium									
Chromium	501	500	100.2	80-120	507	500	101.4	1.2	20
Cobalt									
Copper	510	500	102.0	80-120	523	500	104.6	2.5	20
Gold									
Iron	anr								
Lead	1030	1000	103.0	80-120	1040	1000	104.0	1.0	20
Magnesium									
Manganese	anr								
Molybdenum									
Nickel	503	500	100.6	80-120	504	500	100.8	0.2	20
Palladium									
Platinum									
Potassium									
Selenium	533	500	106.6	80-120	542	500	108.4	1.7	20
Silicon									
Silver	206	200	103.0	80-120	207	200	103.5	0.5	20
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Tungsten									
Vanadium	anr								
Zinc	511	500	102.2	80-120	525	500	105.0	2.7	20

Associated samples MP13688: M83766-2, M83766-4, M83766-6, M83766-8, M83766-10, M83766-12, M83766-14, M83766-16

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M83766
Account: LEA - Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

QC Batch ID: MP13688
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: M83766
 Account: LEA - Loureiro Eng. Associates
 Project: UTC:2009 Quarterly GW-F&H Buildings

QC Batch ID: MP13688
 Matrix Type: AQUEOUS

Methods: SW846 6010B
 Units: ug/l

Prep Date: 06/22/09

Metal	M83766-2 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	anr			
Arsenic	0.00	0.00	NC	0-10
Barium	65.8	68.4	4.0	0-10
Beryllium	anr			
Boron				
Cadmium	0.00	0.00	NC	0-10
Calcium				
Chromium	0.00	0.00	NC	0-10
Cobalt				
Copper	0.00	0.00	NC	0-10
Gold				
Iron	anr			
Lead	0.00	9.40		0-10
Magnesium				
Manganese	anr			
Molybdenum				
Nickel	0.500	0.00	100.0 (a)	0-10
Palladium				
Platinum				
Potassium				
Selenium	0.00	0.00	NC	0-10
Silicon				
Silver	0.00	0.00	NC	0-10
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Tungsten				
Vanadium	anr			
Zinc	6.90	7.90	14.5 (a)	0-10

Associated samples MP13688: M83766-2, M83766-4, M83766-6, M83766-8, M83766-10, M83766-12, M83766-14, M83766-16

SERIAL DILUTION RESULTS SUMMARY

Login Number: M83766
Account: LEA - Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

QC Batch ID: MP13688
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

7.1.4

7

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M83766
Account: LEA - Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

QC Batch ID: MP13693
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 06/23/09

Metal	RL	IDL	MDL	MB raw	final
-------	----	-----	-----	-----------	-------

Mercury	0.20	.035	.048	0.0	<0.20
---------	------	------	------	-----	-------

Associated samples MP13693: M83766-2, M83766-4, M83766-6, M83766-8, M83766-10, M83766-12, M83766-14, M83766-16

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

7.2.1

7

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M83766
 Account: LEA - Loureiro Eng. Associates
 Project: UTC:2009 Quarterly GW-F&H Buildings

QC Batch ID: MP13693
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 06/23/09 06/23/09

Metal	M83572-4 Original MS		Spikelot HGRWS1	% Rec	QC Limits	M83572-4 Original DUP		RPD	QC Limits
Mercury	0.0	2.8	3	93.3	75-125	0.0	0.0	NC	0-20

Associated samples MP13693: M83766-2, M83766-4, M83766-6, M83766-8, M83766-10, M83766-12, M83766-14, M83766-16

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M83766
 Account: LEA - Loureiro Eng. Associates
 Project: UTC:2009 Quarterly GW-F&H Buildings

QC Batch ID: MP13693
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 06/23/09

06/23/09

Metal	BSP Result	Spikelot HGRWS1	% Rec	QC Limits	BSD Result	Spikelot HGRWS1	% Rec	BSD RPD	QC Limit
Mercury	2.9	3	96.7	80-120	2.9	3	96.7	0.0	20

Associated samples MP13693: M83766-2, M83766-4, M83766-6, M83766-8, M83766-10, M83766-12, M83766-14, M83766-16

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested



10/02/09

IT'S ALL IN THE CHEMISTRY

10/02/09

Technical Report for

Loureiro Eng. Associates

UTC:2009 Quarterly GW-F&H Buildings

88UT908

Accutest Job Number: M85952

Sampling Date: 09/18/09

Report to:

LEA

nsemmons@loureiro.com

ATTN: Nate Emmons

Total number of pages in report: **100**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Reza Fand
Lab Director

Client Service contact: Kristen Blanchard 508-481-6200

Certifications: MA (M-MA136) CT (PH-0109) NH (2502) RI (00071) ME (MA0136) FL (E87579)
NY (11791) NJ (MA926) NC (653) IL (200018) NAVY USACE

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Test results relate only to samples analyzed.

Table of Contents

-1-

Section 1: Sample Summary	3
Section 2: Case Narrative/Conformance Summary	5
Section 3: Sample Results	7
3.1: M85952-1: 1131962	8
3.2: M85952-2: 1131962UF	13
3.3: M85952-3: 1131963	14
3.4: M85952-4: 1131963UF	19
3.5: M85952-5: 1131964	20
3.6: M85952-6: 1131964UF	25
3.7: M85952-7: 1131970	26
3.8: M85952-8: 1131970UF	31
3.9: M85952-9: 1131965	32
3.10: M85952-10: 1131965UF	37
3.11: M85952-11: 1131966	38
3.12: M85952-12: 1131966UF	43
3.13: M85952-13: 1131967	44
3.14: M85952-14: 1131967UF	49
3.15: M85952-15: 1131968	50
3.16: M85952-16: 1131968UF	55
3.17: M85952-17: 1131969	56
Section 4: Misc. Forms	59
4.1: Certification Exceptions	60
4.2: Chain of Custody	61
4.3: RCP Form	64
4.4: Sample Tracking Chronicle	65
Section 5: GC/MS Volatiles - QC Data Summaries	68
5.1: Method Blank Summary	69
5.2: Blank Spike/Blank Spike Duplicate Summary	72
5.3: Matrix Spike/Matrix Spike Duplicate Summary	75
5.4: Internal Standard Area Summaries	78
5.5: Surrogate Recovery Summaries	79
Section 6: GC Semi-volatiles - QC Data Summaries	80
6.1: Method Blank Summary	81
6.2: Blank Spike Summary	83
6.3: Matrix Spike/Matrix Spike Duplicate Summary	85
6.4: Surrogate Recovery Summaries	87
Section 7: Metals Analysis - QC Data Summaries	89
7.1: Prep QC MP14130: As,Ba,Cd,Cr,Cu,Pb,Ni,Se,Ag,Zn	90
7.2: Prep QC MP14137: Hg	98



Sample Summary

Loureiro Eng. Associates

Job No: M85952

UTC:2009 Quarterly GW-F&H Buildings
Project No: 88UT908

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
M85952-1	09/18/09	11:00 SK	09/18/09	AQ	Ground Water	1131962
M85952-2	09/18/09	11:00 SK	09/18/09	AQ	Ground Water	1131962UF
M85952-3	09/18/09	12:56 SK	09/18/09	AQ	Ground Water	1131963
M85952-4	09/18/09	12:56 SK	09/18/09	AQ	Ground Water	1131963UF
M85952-5	09/18/09	14:40 SK	09/18/09	AQ	Ground Water	1131964
M85952-6	09/18/09	14:40 SK	09/18/09	AQ	Ground Water	1131964UF
M85952-7	09/18/09	14:40 SK	09/18/09	AQ	Ground Water	1131970
M85952-8	09/18/09	14:40 SK	09/18/09	AQ	Ground Water	1131970UF
M85952-9	09/18/09	12:50 RJZ	09/18/09	AQ	Ground Water	1131965
M85952-10	09/18/09	12:50 RJZ	09/18/09	AQ	Ground Water	1131965UF
M85952-11	09/18/09	10:50 RJZ	09/18/09	AQ	Ground Water	1131966
M85952-12	09/18/09	10:50 RJZ	09/18/09	AQ	Ground Water	1131966UF
M85952-13	09/18/09	14:45 RJZ	09/18/09	AQ	Ground Water	1131967



Sample Summary
(continued)

Loureiro Eng. Associates

Job No: M85952

UTC:2009 Quarterly GW-F&H Buildings
Project No: 88UT908

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
M85952-14	09/18/09	14:45 RJZ	09/18/09	AQ	Ground Water	1131967UF
M85952-15	09/18/09	15:15 RJZ	09/18/09	AQ	Ground Water	1131968
M85952-16	09/18/09	15:15 RJZ	09/18/09	AQ	Ground Water	1131968UF
M85952-17	09/18/09	15:20 RJZ	09/18/09	AQ	Ground Water	1131969

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Loureiro Eng. Associates

Job No M85952

Site: UTC:2009 Quarterly GW-F&H Buildings

Report Date 10/2/2009 5:17:36 PM

17 Sample(s) were collected on 09/18/2009 and were received at Accutest on 09/18/2009 properly preserved, at 2.1 Deg. C and intact. These Samples received an Accutest job number of M85952. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix AQ

Batch ID: MSN1374

- All samples were analyzed within the recommended method holding time.
- Sample(s) M86025-7MS, M86025-7MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Initial calibration standard MSN1367-ICC1367 for dichlorodifluoromethane, methyl tert butyl ether, 2,2-dichloropropane, carbon tetrachloride are employed quadratic regression

Initial calibration verification standard MSN1367-ICV1367 for isopropylbenzene exceed 35% Difference.

- MSN1374-BS/BSD, MSD for Isopropylbenzene: Outside control limits. Associated samples are non-detect for this compound.

Extractables by GC By Method CT-ETPH 7/06

Matrix AQ

Batch ID: OP19559

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) M86006-18MS, M86006-18MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Extractables by GC By Method SW846 8082

Matrix AQ

Batch ID: OP19558

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M86006-19MS, M86006-19MSD were used as the QC samples indicated.

Metals By Method SW846 6010B

Matrix AQ

Batch ID: MP14130

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M85952-2DUP, M85952-2MS, M85952-2SDL, M85952-2DUP were used as the QC samples for metals.
- RPD(s) for Duplicate for Zinc are outside control limits for sample MP14130-D1. RPD acceptable due to low duplicate and sample concentrations.
- RPD(s) for Serial Dilution for Nickel, Zinc are outside control limits for sample MP14130-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- Only selected metals requested.

Metals By Method SW846 7470A

Matrix AQ

Batch ID: MP14137

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M85952-2DUP, M85952-2MS were used as the QC samples for metals.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety. The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report (M85952).



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	1131962	Date Sampled:	09/18/09
Lab Sample ID:	M85952-1	Date Received:	09/18/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N36773.D	1	09/24/09	WC	n/a	n/a	MSN1374
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1131962	Date Sampled:	09/18/09
Lab Sample ID:	M85952-1	Date Received:	09/18/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	3.8	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	2.8	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1131962		
Lab Sample ID:	M85952-1	Date Sampled:	09/18/09
Matrix:	AQ - Ground Water	Date Received:	09/18/09
Method:	SW846 8260B	Percent Solids:	n/a
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	97%		70-130%
460-00-4	4-Bromofluorobenzene	90%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1131962						
Lab Sample ID:	M85952-1				Date Sampled:	09/18/09	
Matrix:	AQ - Ground Water				Date Received:	09/18/09	
Method:	CT-ETPH 7/06 SW846 3510C				Percent Solids:	n/a	
Project:	UTC:2009 Quarterly GW-F&H Buildings						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BC32396.D	1	10/01/09	KD	09/24/09	OP19559	GBC1691
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	0.408	0.089	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
3386-33-2	1-Chlorooctadecane	97%		50-149%	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1131962		
Lab Sample ID:	M85952-1	Date Sampled:	09/18/09
Matrix:	AQ - Ground Water	Date Received:	09/18/09
Method:	SW846 8082 SW846 3510C	Percent Solids:	n/a
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70471.D	1	09/29/09	SL	09/24/09	OP19558	GEF3240
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	99%		30-150%
877-09-8	Tetrachloro-m-xylene	98%		30-150%
2051-24-3	Decachlorobiphenyl	98%		30-150%
2051-24-3	Decachlorobiphenyl	104%		30-150%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1131962UF**Lab Sample ID:** M85952-2**Matrix:** AQ - Ground Water**Date Sampled:** 09/18/09**Date Received:** 09/18/09**Percent Solids:** n/a**Project:** UTC:2009 Quarterly GW-F&H Buildings**Total Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Barium	< 200	200	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Cadmium	< 4.0	4.0	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Chromium	< 10	10	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Copper	< 25	25	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Lead	< 5.0	5.0	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	09/22/09	09/22/09 MA	SW846 7470A ¹	SW846 7470A ⁴
Nickel	< 40	40	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Selenium	< 10	10	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Silver	< 5.0	5.0	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Zinc	< 20	20	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³

(1) Instrument QC Batch: MA10978

(2) Instrument QC Batch: MA10989

(3) Prep QC Batch: MP14130

(4) Prep QC Batch: MP14137

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1131963	Date Sampled:	09/18/09
Lab Sample ID:	M85952-3	Date Received:	09/18/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N36774.D	1	09/24/09	WC	n/a	n/a	MSN1374
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1131963	Date Sampled:	09/18/09
Lab Sample ID:	M85952-3	Date Received:	09/18/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	1.8	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1131963	Date Sampled:	09/18/09
Lab Sample ID:	M85952-3	Date Received:	09/18/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	97%		70-130%
460-00-4	4-Bromofluorobenzene	90%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1131963
Lab Sample ID: M85952-3
Matrix: AQ - Ground Water
Method: CT-ETPH 7/06 SW846 3510C
Project: UTC:2009 Quarterly GW-F&H Buildings

Date Sampled: 09/18/09
Date Received: 09/18/09
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BC32398.D	1	10/01/09	KD	09/24/09	OP19559	GBC1691
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	1.32	0.084	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	93%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1131963		
Lab Sample ID:	M85952-3	Date Sampled:	09/18/09
Matrix:	AQ - Ground Water	Date Received:	09/18/09
Method:	SW846 8082 SW846 3510C	Percent Solids:	n/a
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70472.D	1	09/29/09	SL	09/24/09	OP19558	GEF3240
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	92%		30-150%
877-09-8	Tetrachloro-m-xylene	89%		30-150%
2051-24-3	Decachlorobiphenyl	91%		30-150%
2051-24-3	Decachlorobiphenyl	94%		30-150%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1131963UF**Lab Sample ID:** M85952-4**Matrix:** AQ - Ground Water**Date Sampled:** 09/18/09**Date Received:** 09/18/09**Percent Solids:** n/a**Project:** UTC:2009 Quarterly GW-F&H Buildings**Total Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Barium	< 200	200	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Cadmium	< 4.0	4.0	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Chromium	< 10	10	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Copper	< 25	25	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Lead	< 5.0	5.0	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	09/22/09	09/22/09 MA	SW846 7470A ¹	SW846 7470A ⁴
Nickel	< 40	40	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Selenium	< 10	10	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Silver	< 5.0	5.0	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Zinc	< 20	20	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³

(1) Instrument QC Batch: MA10978

(2) Instrument QC Batch: MA10989

(3) Prep QC Batch: MP14130

(4) Prep QC Batch: MP14137

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1131964	Date Sampled:	09/18/09
Lab Sample ID:	M85952-5	Date Received:	09/18/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N36775.D	1	09/24/09	WC	n/a	n/a	MSN1374
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1131964	Date Sampled:	09/18/09
Lab Sample ID:	M85952-5	Date Received:	09/18/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	53.0	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1131964		
Lab Sample ID:	M85952-5	Date Sampled:	09/18/09
Matrix:	AQ - Ground Water	Date Received:	09/18/09
Method:	SW846 8260B	Percent Solids:	n/a
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	96%		70-130%
460-00-4	4-Bromofluorobenzene	87%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1131964
Lab Sample ID: M85952-5
Matrix: AQ - Ground Water
Method: CT-ETPH 7/06 SW846 3510C
Project: UTC:2009 Quarterly GW-F&H Buildings

Date Sampled: 09/18/09
Date Received: 09/18/09
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BC32400.D	1	10/01/09	KD	09/24/09	OP19559	GBC1691
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	0.416	0.089	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
3386-33-2	1-Chlorooctadecane	92%		50-149%	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1131964		
Lab Sample ID:	M85952-5	Date Sampled:	09/18/09
Matrix:	AQ - Ground Water	Date Received:	09/18/09
Method:	SW846 8082 SW846 3510C	Percent Solids:	n/a
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70473.D	1	09/29/09	SL	09/24/09	OP19558	GEF3240
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	108%		30-150%
877-09-8	Tetrachloro-m-xylene	107%		30-150%
2051-24-3	Decachlorobiphenyl	94%		30-150%
2051-24-3	Decachlorobiphenyl	98%		30-150%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1131964UF**Lab Sample ID:** M85952-6**Matrix:** AQ - Ground Water**Date Sampled:** 09/18/09**Date Received:** 09/18/09**Percent Solids:** n/a**Project:** UTC:2009 Quarterly GW-F&H Buildings**Total Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Barium	< 200	200	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Cadmium	< 4.0	4.0	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Chromium	< 10	10	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Copper	< 25	25	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Lead	< 5.0	5.0	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	09/22/09	09/22/09 MA	SW846 7470A ¹	SW846 7470A ⁴
Nickel	< 40	40	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Selenium	< 10	10	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Silver	< 5.0	5.0	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Zinc	< 20	20	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³

(1) Instrument QC Batch: MA10978

(2) Instrument QC Batch: MA10989

(3) Prep QC Batch: MP14130

(4) Prep QC Batch: MP14137

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1131970		
Lab Sample ID:	M85952-7	Date Sampled:	09/18/09
Matrix:	AQ - Ground Water	Date Received:	09/18/09
Method:	SW846 8260B	Percent Solids:	n/a
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N36776.D	1	09/24/09	WC	n/a	n/a	MSN1374
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1131970	Date Sampled:	09/18/09
Lab Sample ID:	M85952-7	Date Received:	09/18/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	52.4	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1131970	Date Sampled:	09/18/09
Lab Sample ID:	M85952-7	Date Received:	09/18/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	94%		70-130%
460-00-4	4-Bromofluorobenzene	87%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1131970		
Lab Sample ID:	M85952-7	Date Sampled:	09/18/09
Matrix:	AQ - Ground Water	Date Received:	09/18/09
Method:	CT-ETPH 7/06 SW846 3510C	Percent Solids:	n/a
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BC32402.D	1	10/01/09	KD	09/24/09	OP19559	GBC1691
Run #2							

	Initial Volume	Final Volume
Run #1	800 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	0.159	0.10	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
3386-33-2	1-Chlorooctadecane	94%		50-149%	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1131970
Lab Sample ID: M85952-7
Matrix: AQ - Ground Water
Method: SW846 8082 SW846 3510C
Project: UTC:2009 Quarterly GW-F&H Buildings

Date Sampled: 09/18/09

Date Received: 09/18/09

Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70474.D	1	09/29/09	SL	09/24/09	OP19558	GEF3240
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	106%		30-150%
877-09-8	Tetrachloro-m-xylene	105%		30-150%
2051-24-3	Decachlorobiphenyl	96%		30-150%
2051-24-3	Decachlorobiphenyl	101%		30-150%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1131970UF

Lab Sample ID: M85952-8

Matrix: AQ - Ground Water

Date Sampled: 09/18/09

Date Received: 09/18/09

Percent Solids: n/a

Project: UTC:2009 Quarterly GW-F&H Buildings

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Barium	< 200	200	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Cadmium	< 4.0	4.0	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Chromium	< 10	10	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Copper	< 25	25	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Lead	< 5.0	5.0	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	09/22/09	09/22/09 MA	SW846 7470A ¹	SW846 7470A ⁴
Nickel	< 40	40	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Selenium	< 10	10	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Silver	< 5.0	5.0	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Zinc	< 20	20	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³

(1) Instrument QC Batch: MA10978

(2) Instrument QC Batch: MA10989

(3) Prep QC Batch: MP14130

(4) Prep QC Batch: MP14137

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1131965		
Lab Sample ID:	M85952-9	Date Sampled:	09/18/09
Matrix:	AQ - Ground Water	Date Received:	09/18/09
Method:	SW846 8260B	Percent Solids:	n/a
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N36777.D	1	09/24/09	WC	n/a	n/a	MSN1374
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	1.2	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	1.4	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1131965	Date Sampled:	09/18/09
Lab Sample ID:	M85952-9	Date Received:	09/18/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	23.8	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	2.6	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	1.7	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1131965		
Lab Sample ID:	M85952-9	Date Sampled:	09/18/09
Matrix:	AQ - Ground Water	Date Received:	09/18/09
Method:	SW846 8260B	Percent Solids:	n/a
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	96%		70-130%
460-00-4	4-Bromofluorobenzene	91%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1131965
Lab Sample ID: M85952-9
Matrix: AQ - Ground Water
Method: CT-ETPH 7/06 SW846 3510C
Project: UTC:2009 Quarterly GW-F&H Buildings

Date Sampled: 09/18/09
Date Received: 09/18/09
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BC32404.D	1	10/02/09	KD	09/24/09	OP19559	GBC1691
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	0.557	0.084	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	126%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1131965		
Lab Sample ID:	M85952-9	Date Sampled:	09/18/09
Matrix:	AQ - Ground Water	Date Received:	09/18/09
Method:	SW846 8082 SW846 3510C	Percent Solids:	n/a
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70475.D	1	09/29/09	SL	09/24/09	OP19558	GEF3240
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	108%		30-150%
877-09-8	Tetrachloro-m-xylene	106%		30-150%
2051-24-3	Decachlorobiphenyl	80%		30-150%
2051-24-3	Decachlorobiphenyl	83%		30-150%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1131965UF

Lab Sample ID: M85952-10

Matrix: AQ - Ground Water

Date Sampled: 09/18/09

Date Received: 09/18/09

Percent Solids: n/a

Project: UTC:2009 Quarterly GW-F&H Buildings

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Barium	< 200	200	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Cadmium	< 4.0	4.0	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Chromium	< 10	10	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Copper	< 25	25	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Lead	< 5.0	5.0	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	09/22/09	09/22/09 MA	SW846 7470A ¹	SW846 7470A ⁴
Nickel	< 40	40	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Selenium	< 10	10	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Silver	< 5.0	5.0	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Zinc	< 20	20	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³

(1) Instrument QC Batch: MA10978

(2) Instrument QC Batch: MA10989

(3) Prep QC Batch: MP14130

(4) Prep QC Batch: MP14137

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1131966	Date Sampled:	09/18/09
Lab Sample ID:	M85952-11	Date Received:	09/18/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N36778.D	1	09/24/09	WC	n/a	n/a	MSN1374
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1131966	Date Sampled:	09/18/09
Lab Sample ID:	M85952-11	Date Received:	09/18/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1131966	Date Sampled:	09/18/09
Lab Sample ID:	M85952-11	Date Received:	09/18/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	96%		70-130%
460-00-4	4-Bromofluorobenzene	89%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1131966**Lab Sample ID:** M85952-11**Date Sampled:** 09/18/09**Matrix:** AQ - Ground Water**Date Received:** 09/18/09**Method:** CT-ETPH 7/06 SW846 3510C**Percent Solids:** n/a**Project:** UTC:2009 Quarterly GW-F&H Buildings

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BC32408.D	1	10/02/09	KD	09/24/09	OP19559	GBC1691
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	0.0967	0.084	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	111%		50-149%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1131966		
Lab Sample ID:	M85952-11	Date Sampled:	09/18/09
Matrix:	AQ - Ground Water	Date Received:	09/18/09
Method:	SW846 8082 SW846 3510C	Percent Solids:	n/a
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70477.D	1	09/29/09	SL	09/24/09	OP19558	GEF3240
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	96%		30-150%
877-09-8	Tetrachloro-m-xylene	92%		30-150%
2051-24-3	Decachlorobiphenyl	79%		30-150%
2051-24-3	Decachlorobiphenyl	82%		30-150%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1131966UF

Lab Sample ID: M85952-12

Matrix: AQ - Ground Water

Date Sampled: 09/18/09

Date Received: 09/18/09

Percent Solids: n/a

Project: UTC:2009 Quarterly GW-F&H Buildings

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Barium	< 200	200	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Cadmium	< 4.0	4.0	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Chromium	136	10	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Copper	42.6	25	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Lead	< 5.0	5.0	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	09/22/09	09/22/09 MA	SW846 7470A ¹	SW846 7470A ⁴
Nickel	85.6	40	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Selenium	< 10	10	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Silver	< 5.0	5.0	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Zinc	< 20	20	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³

(1) Instrument QC Batch: MA10978

(2) Instrument QC Batch: MA10989

(3) Prep QC Batch: MP14130

(4) Prep QC Batch: MP14137

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1131967		
Lab Sample ID:	M85952-13	Date Sampled:	09/18/09
Matrix:	AQ - Ground Water	Date Received:	09/18/09
Method:	SW846 8260B	Percent Solids:	n/a
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N36779.D	1	09/24/09	WC	n/a	n/a	MSN1374
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1131967	Date Sampled:	09/18/09
Lab Sample ID:	M85952-13	Date Received:	09/18/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1131967	Date Sampled:	09/18/09
Lab Sample ID:	M85952-13	Date Received:	09/18/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	96%		70-130%
460-00-4	4-Bromofluorobenzene	90%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1131967						
Lab Sample ID:	M85952-13				Date Sampled:	09/18/09	
Matrix:	AQ - Ground Water				Date Received:	09/18/09	
Method:	CT-ETPH 7/06 SW846 3510C				Percent Solids:	n/a	
Project:	UTC:2009 Quarterly GW-F&H Buildings						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BC32410.D	1	10/02/09	KD	09/24/09	OP19559	GBC1691
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	0.187	0.084	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
3386-33-2	1-Chlorooctadecane	92%		50-149%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1131967		
Lab Sample ID:	M85952-13	Date Sampled:	09/18/09
Matrix:	AQ - Ground Water	Date Received:	09/18/09
Method:	SW846 8082 SW846 3510C	Percent Solids:	n/a
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70478.D	1	09/29/09	SL	09/24/09	OP19558	GEF3240
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	90%		30-150%
877-09-8	Tetrachloro-m-xylene	90%		30-150%
2051-24-3	Decachlorobiphenyl	78%		30-150%
2051-24-3	Decachlorobiphenyl	81%		30-150%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1131967UF**Lab Sample ID:** M85952-14**Matrix:** AQ - Ground Water**Date Sampled:** 09/18/09**Date Received:** 09/18/09**Percent Solids:** n/a**Project:** UTC:2009 Quarterly GW-F&H Buildings**Total Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Barium	< 200	200	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Cadmium	< 4.0	4.0	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Chromium	< 10	10	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Copper	< 25	25	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Lead	< 5.0	5.0	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	09/22/09	09/22/09 MA	SW846 7470A ¹	SW846 7470A ⁴
Nickel	< 40	40	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Selenium	< 10	10	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Silver	< 5.0	5.0	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Zinc	< 20	20	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³

(1) Instrument QC Batch: MA10978

(2) Instrument QC Batch: MA10989

(3) Prep QC Batch: MP14130

(4) Prep QC Batch: MP14137

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1131968	Date Sampled:	09/18/09
Lab Sample ID:	M85952-15	Date Received:	09/18/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N36780.D	1	09/24/09	WC	n/a	n/a	MSN1374
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1131968

Lab Sample ID: M85952-15

Date Sampled: 09/18/09

Matrix: AQ - Ground Water

Date Received: 09/18/09

Method: SW846 8260B

Percent Solids: n/a

Project: UTC:2009 Quarterly GW-F&H Buildings

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1131968	Date Sampled:	09/18/09
Lab Sample ID:	M85952-15	Date Received:	09/18/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	96%		70-130%
460-00-4	4-Bromofluorobenzene	88%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1131968**Lab Sample ID:** M85952-15**Date Sampled:** 09/18/09**Matrix:** AQ - Ground Water**Date Received:** 09/18/09**Method:** CT-ETPH 7/06 SW846 3510C**Percent Solids:** n/a**Project:** UTC:2009 Quarterly GW-F&H Buildings

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BC32412.D	1	10/02/09	KD	09/24/09	OP19559	GBC1691
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	0.0840	0.084	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	70%		50-149%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1131968		
Lab Sample ID:	M85952-15	Date Sampled:	09/18/09
Matrix:	AQ - Ground Water	Date Received:	09/18/09
Method:	SW846 8082 SW846 3510C	Percent Solids:	n/a
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF70479.D	1	09/30/09	SL	09/24/09	OP19558	GEF3240
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	82%		30-150%
877-09-8	Tetrachloro-m-xylene	80%		30-150%
2051-24-3	Decachlorobiphenyl	43%		30-150%
2051-24-3	Decachlorobiphenyl	44%		30-150%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1131968UF**Lab Sample ID:** M85952-16**Matrix:** AQ - Ground Water**Date Sampled:** 09/18/09**Date Received:** 09/18/09**Percent Solids:** n/a**Project:** UTC:2009 Quarterly GW-F&H Buildings**Total Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Barium	< 200	200	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Cadmium	< 4.0	4.0	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Chromium	< 10	10	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Copper	< 25	25	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Lead	< 5.0	5.0	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	09/22/09	09/22/09 MA	SW846 7470A ¹	SW846 7470A ⁴
Nickel	< 40	40	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Selenium	< 10	10	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Silver	< 5.0	5.0	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³
Zinc	< 20	20	ug/l	1	09/21/09	09/22/09 PY	SW846 6010B ²	SW846 3010A ³

(1) Instrument QC Batch: MA10978

(2) Instrument QC Batch: MA10989

(3) Prep QC Batch: MP14130

(4) Prep QC Batch: MP14137

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1131969	Date Sampled:	09/18/09
Lab Sample ID:	M85952-17	Date Received:	09/18/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N36781.D	1	09/24/09	WC	n/a	n/a	MSN1374
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1131969	Date Sampled:	09/18/09
Lab Sample ID:	M85952-17	Date Received:	09/18/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1131969		
Lab Sample ID:	M85952-17	Date Sampled:	09/18/09
Matrix:	AQ - Ground Water	Date Received:	09/18/09
Method:	SW846 8260B	Percent Solids:	n/a
Project:	UTC:2009 Quarterly GW-F&H Buildings		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	96%		70-130%
460-00-4	4-Bromofluorobenzene	88%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Certification Exceptions (CT)
- Chain of Custody
- RCP Form
- Sample Tracking Chronicle

Parameter Certification Exceptions

Job Number: M85952
Account: LEA Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
Aroclor 1262	37324-23-5	SW846 8082	AQ	Certified by SOP MGC204/GC-ECD
Aroclor 1268	11100-14-4	SW846 8082	AQ	Certified by SOP MGC204/GC-ECD

4.1
4



495 TECHNOLOGY CENTER WEST • BUILDING ONE
MARLBOROUGH, MA 01752
TEL: 508-481-6200 • FAX: 508-481-7753

1785952

ACCUTEST QUOTE #:

4.2

Page 1 of 3

CHAIN OF CUSTODY

495 TECHNOLOGY CENTER WEST • BUILDING ONE
MARLBOROUGH, MA 01752
TEL: 508-481-6200 • FAX: 508-481-7753

ACCUTEST JOB #: **M85952**
ACCUTEST QUOTE #:

CLIENT INFORMATION			FACILITY INFORMATION			ANALYTICAL INFORMATION										MATRIX CODES		
LOUREIRO ENGINEERING NAME: 100 Northwest Dr ADDRESS: Plattville CITY: CT STATE: CT ZIP: 06060 SEND REPORT TO: PHONE #			UTC PTH FTH GW Monitoring 2009 PROJECT NAME: PLV East Hartford LOCATION: BBUT908.001 PROJECT NO.: FAX #:			RCV VOCs RCV PCBs CT EPTH RCRAB METALS ANALYSIS										DW - DRINKING WATER GW - GROUND WATER WW - WASTE WATER SO - SOIL SL - SLUDGE OI - OIL LIQ - OTHER LIQUID SOL - OTHER SOLID		
ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION			MATRIX	# OF BOTTLES	PRESERVATION								LAB USE ONLY			
		DATE	TIME	SAMPLED BY:			NO	NOH	NOH3	NOH4	NOH5	NOH6	NOH7					
-9	1131965	9/18/09	12:50	RJZ	GW	2	X											
	1131965	9/18/09	12:50	RJZ	GW	2												
	1131965	9/18/09	12:50	RJZ	GW	2												
-10	1131965 uf	9/18/09	12:50	RJZ	GW	1		X										
	1131966	9/18/09	10:50	RJZ	GW	2	X											
-11	1131966	9/18/09	10:50	RJZ	GW	2												
	1131966	9/18/09	10:50	RJZ	GW	2												
-12	1131966 uf	9/18/09	10:50	RJZ	GW	1		X										
	1131967	9/18/09	14:45	RJZ	GW	2	X											
-13	1131967	9/18/09	14:45	RJZ	GW	2												
	1131967	9/18/09	14:45	RJZ	GW	2												
DATA TURNAROUND INFORMATION <input checked="" type="checkbox"/> 14 DAYS STANDARD <input type="checkbox"/> 7 DAYS RUSH <input type="checkbox"/> 48 HOUR EMERGENCY <input type="checkbox"/> OTHER 14 DAY TURNAROUND HARDCOPY. EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED			DATA DELIVERABLE INFORMATION <input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> COMMERCIAL "B" <input type="checkbox"/> DISK DELIVERABLE <input type="checkbox"/> STATE FORMS <input type="checkbox"/> OTHER (SPECIFY)			COMMENTS/REMARKS												
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY																		
RELINQUISHED BY SAMPLER:		DATE TIME:		RECEIVED BY:		RELINQUISHED BY:		DATE TIME:		RECEIVED BY:		RELINQUISHED BY:		DATE TIME:		RECEIVED BY:		
1. <i>[Signature]</i>		9/18/09		1. <i>[Signature]</i>		2. <i>[Signature]</i>				3. <i>[Signature]</i>		4. <i>[Signature]</i>				5. <i>[Signature]</i>		
RELINQUISHED BY:		DATE TIME:		RECEIVED BY:		RELINQUISHED BY:		DATE TIME:		RECEIVED BY:		RELINQUISHED BY:		DATE TIME:		RECEIVED BY:		
3.				3.		4.				4.		5.				5.		
RELINQUISHED BY:		DATE TIME:		RECEIVED BY:		SEAL #		PRESERVE WHERE APPLICABLE		ON ICE		TEMPERATURE						
5.				5.				<input type="checkbox"/>		<input type="checkbox"/>		2-1 C						

M85952: Chain of Custody

Page 2 of 3



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M85952

ACCUTEST QUOTE #:

4.2

Page 3 of 3

Reasonable Confidence Protocol Laboratory Analysis QA/QC Certification Form

Laboratory Name: Accutest New England Client: Loureiro Eng. Associates

Project Location: UTC:2009 Quarterly GW-F&H Buildings Project Number: 88UT908

Sampling Date(s): 9/18/2009

Laboratory Sample ID(s): M85952-1, M85952-2, M85952-3, M85952-4, M85952-5, M85952-6, M85952-7, M85952-8, M85952-9, M85952-10, M85952-11, M85952-12, M85952-13, M85952-14, M85952-15, M85952-16, M85952-17

Methods: CT-ETPH 7/06, SW846 6010B, SW846 7470A, SW846 8082, 8260B

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CTDEP method-specific Reasonable Confidence Protocol documents)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1A	Where all the method specified preservation and holding time requirements met?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1B	VPH and EPH methods only: Was the VPH or EPH method conducted without significant modifications (See section 11.3 of respective methods)	Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input checked="" type="checkbox"/>
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
3	Were samples received at an appropriate temperature (<6° C)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
4	Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
5	a) Were reporting limits specified or referenced on the chain-of-custody?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
	b) Were these reporting limits met?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Note: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence".

I, the undersigned, attest under pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized

Signature:

Position: Lab Director

Printed Name: Reza Tand
Accutest New England

Date: 10/2/2009

Internal Sample Tracking Chronicle

Loureiro Eng. Associates

Job No: M85952

UTC:2009 Quarterly GW-F&H Buildings

Project No: 88UT908

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M85952-1 1131962	Collected: 18-SEP-09 11:00	By: SK	Received: 18-SEP-09 By: JB			
M85952-1	SW846 8260B	24-SEP-09 13:24	WC			V8260RCP
M85952-1	SW846 8082	29-SEP-09 19:26	SL	24-SEP-09	DG	P8082RCP
M85952-1	CT-ETPH 7/06	01-OCT-09 21:49	KD	24-SEP-09	DG	BCTTPH
M85952-2 1131962UF	Collected: 18-SEP-09 11:00	By: SK	Received: 18-SEP-09 By: JB			
M85952-2	SW846 7470A	22-SEP-09 13:56	MA	22-SEP-09	MA	HG
M85952-2	SW846 6010B	22-SEP-09 18:17	PY	21-SEP-09	EAL	AG,AS,BA,CD,CR,CU,NI,PB,SE, ZN
M85952-3 1131963	Collected: 18-SEP-09 12:56	By: SK	Received: 18-SEP-09 By: JB			
M85952-3	SW846 8260B	24-SEP-09 13:52	WC			V8260RCP
M85952-3	SW846 8082	29-SEP-09 19:55	SL	24-SEP-09	DG	P8082RCP
M85952-3	CT-ETPH 7/06	01-OCT-09 22:28	KD	24-SEP-09	DG	BCTTPH
M85952-4 1131963UF	Collected: 18-SEP-09 12:56	By: SK	Received: 18-SEP-09 By: JB			
M85952-4	SW846 7470A	22-SEP-09 14:02	MA	22-SEP-09	MA	HG
M85952-4	SW846 6010B	22-SEP-09 18:42	PY	21-SEP-09	EAL	AG,AS,BA,CD,CR,CU,NI,PB,SE, ZN
M85952-5 1131964	Collected: 18-SEP-09 14:40	By: SK	Received: 18-SEP-09 By: JB			
M85952-5	SW846 8260B	24-SEP-09 14:21	WC			V8260RCP
M85952-5	SW846 8082	29-SEP-09 20:40	SL	24-SEP-09	DG	P8082RCP
M85952-5	CT-ETPH 7/06	01-OCT-09 23:08	KD	24-SEP-09	DG	BCTTPH
M85952-6 1131964UF	Collected: 18-SEP-09 14:40	By: SK	Received: 18-SEP-09 By: JB			
M85952-6	SW846 7470A	22-SEP-09 14:05	MA	22-SEP-09	MA	HG

Internal Sample Tracking Chronicle

Loureiro Eng. Associates

Job No: M85952

UTC:2009 Quarterly GW-F&H Buildings

Project No: 88UT908

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M85952-6	SW846 6010B	22-SEP-09 18:47	PY	21-SEP-09	EAL	AG,AS,BA,CD,CR,CU,NI,PB,SE, ZN
M85952-7 1131970	Collected: 18-SEP-09 14:40 By: SK		Received: 18-SEP-09 By: JB			
M85952-7	SW846 8260B	24-SEP-09 14:49	WC			V8260RCP
M85952-7	SW846 8082	29-SEP-09 21:09	SL	24-SEP-09	DG	P8082RCP
M85952-7	CT-ETPH 7/06	01-OCT-09 23:48	KD	24-SEP-09	DG	BCTTPH
M85952-8 1131970UF	Collected: 18-SEP-09 14:40 By: SK		Received: 18-SEP-09 By: JB			
M85952-8	SW846 7470A	22-SEP-09 14:11	MA	22-SEP-09	MA	HG
M85952-8	SW846 6010B	22-SEP-09 18:51	PY	21-SEP-09	EAL	AG,AS,BA,CD,CR,CU,NI,PB,SE, ZN
M85952-9 1131965	Collected: 18-SEP-09 12:50 By: RJZ		Received: 18-SEP-09 By: JB			
M85952-9	SW846 8260B	24-SEP-09 15:18	WC			V8260RCP
M85952-9	SW846 8082	29-SEP-09 21:54	SL	24-SEP-09	DG	P8082RCP
M85952-9	CT-ETPH 7/06	02-OCT-09 00:28	KD	24-SEP-09	DG	BCTTPH
M85952-10 1131965UF	Collected: 18-SEP-09 12:50 By: RJZ		Received: 18-SEP-09 By: JB			
M85952-10	SW846 7470A	22-SEP-09 14:14	MA	22-SEP-09	MA	HG
M85952-10	SW846 6010B	22-SEP-09 18:55	PY	21-SEP-09	EAL	AG,AS,BA,CD,CR,CU,NI,PB,SE, ZN
M85952-11 1131966	Collected: 18-SEP-09 10:50 By: RJZ		Received: 18-SEP-09 By: JB			
M85952-11	SW846 8260B	24-SEP-09 15:46	WC			V8260RCP
M85952-11	SW846 8082	29-SEP-09 23:08	SL	24-SEP-09	DG	P8082RCP
M85952-11	CT-ETPH 7/06	02-OCT-09 01:47	KD	24-SEP-09	DG	BCTTPH

Internal Sample Tracking Chronicle

Loureiro Eng. Associates

Job No: M85952

UTC:2009 Quarterly GW-F&H Buildings
Project No: 88UT908

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M85952-12 Collected: 18-SEP-09 10:50 By: RJZ Received: 18-SEP-09 By: JB 1131966UF						
M85952-12	SW846 7470A	22-SEP-09 14:16	MA	22-SEP-09	MA	HG
M85952-12	SW846 6010B	22-SEP-09 19:00	PY	21-SEP-09	EAL	AG,AS,BA,CD,CR,CU,NI,PB,SE, ZN
M85952-13 Collected: 18-SEP-09 14:45 By: RJZ Received: 18-SEP-09 By: JB 1131967						
M85952-13	SW846 8260B	24-SEP-09 16:15	WC			V8260RCP
M85952-13	SW846 8082	29-SEP-09 23:37	SL	24-SEP-09	DG	P8082RCP
M85952-13	CT-ETPH 7/06	02-OCT-09 02:27	KD	24-SEP-09	DG	BCTTPH
M85952-14 Collected: 18-SEP-09 14:45 By: RJZ Received: 18-SEP-09 By: JB 1131967UF						
M85952-14	SW846 7470A	22-SEP-09 14:18	MA	22-SEP-09	MA	HG
M85952-14	SW846 6010B	22-SEP-09 19:04	PY	21-SEP-09	EAL	AG,AS,BA,CD,CR,CU,NI,PB,SE, ZN
M85952-15 Collected: 18-SEP-09 15:15 By: RJZ Received: 18-SEP-09 By: JB 1131968						
M85952-15	SW846 8260B	24-SEP-09 16:43	WC			V8260RCP
M85952-15	SW846 8082	30-SEP-09 00:21	SL	24-SEP-09	DG	P8082RCP
M85952-15	CT-ETPH 7/06	02-OCT-09 03:06	KD	24-SEP-09	DG	BCTTPH
M85952-16 Collected: 18-SEP-09 15:15 By: RJZ Received: 18-SEP-09 By: JB 1131968UF						
M85952-16	SW846 7470A	22-SEP-09 14:20	MA	22-SEP-09	MA	HG
M85952-16	SW846 6010B	22-SEP-09 19:08	PY	21-SEP-09	EAL	AG,AS,BA,CD,CR,CU,NI,PB,SE, ZN
M85952-17 Collected: 18-SEP-09 15:20 By: RJZ Received: 18-SEP-09 By: JB 1131969						
M85952-17	SW846 8260B	24-SEP-09 17:12	WC			V8260RCP



GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Page 1 of 3

Job Number: M85952**Account:** LEA Loureiro Eng. Associates**Project:** UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN1374-MB	N36769.D	1	09/24/09	WC	n/a	n/a	MSN1374

The QC reported here applies to the following samples:**Method:** SW846 8260B

M85952-1, M85952-3, M85952-5, M85952-7, M85952-9, M85952-11, M85952-13, M85952-15, M85952-17

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	

Method Blank Summary

Page 2 of 3

Job Number: M85952
Account: LEA Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN1374-MB	N36769.D	1	09/24/09	WC	n/a	n/a	MSN1374

The QC reported here applies to the following samples:

Method: SW846 8260B

M85952-1, M85952-3, M85952-5, M85952-7, M85952-9, M85952-11, M85952-13, M85952-15, M85952-17

CAS No.	Compound	Result	RL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

Method Blank Summary

Job Number: M85952
Account: LEA Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN1374-MB	N36769.D	1	09/24/09	WC	n/a	n/a	MSN1374

The QC reported here applies to the following samples: Method: SW846 8260B

M85952-1, M85952-3, M85952-5, M85952-7, M85952-9, M85952-11, M85952-13, M85952-15, M85952-17

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	100% 70-130%
2037-26-5	Toluene-D8	95% 70-130%
460-00-4	4-Bromofluorobenzene	92% 70-130%

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 3

Job Number: M85952**Account:** LEA Loureiro Eng. Associates**Project:** UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN1374-BS	N36766.D	1	09/24/09	WC	n/a	n/a	MSN1374
MSN1374-BSD	N36767.D	1	09/24/09	WC	n/a	n/a	MSN1374

The QC reported here applies to the following samples:**Method:** SW846 8260B

M85952-1, M85952-3, M85952-5, M85952-7, M85952-9, M85952-11, M85952-13, M85952-15, M85952-17

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	50	50.0	100	55.7	111	11	70-130/25
107-13-1	Acrylonitrile	250	278	111	265	106	5	70-130/25
71-43-2	Benzene	50	52.3	105	53.4	107	2	70-130/25
108-86-1	Bromobenzene	50	56.5	113	56.6	113	0	70-130/25
75-27-4	Bromodichloromethane	50	55.0	110	56.1	112	2	70-130/25
75-25-2	Bromoform	50	55.8	112	55.2	110	1	70-130/25
74-83-9	Bromomethane	50	51.6	103	52.4	105	2	70-130/25
78-93-3	2-Butanone (MEK)	50	50.5	101	52.9	106	5	70-130/25
104-51-8	n-Butylbenzene	50	55.8	112	56.2	112	1	70-130/25
135-98-8	sec-Butylbenzene	50	58.6	117	58.9	118	1	70-130/25
98-06-6	tert-Butylbenzene	50	54.5	109	54.4	109	0	70-130/25
75-15-0	Carbon disulfide	50	52.2	104	52.8	106	1	70-130/25
56-23-5	Carbon tetrachloride	50	50.0	100	50.8	102	2	70-130/25
108-90-7	Chlorobenzene	50	52.4	105	51.8	104	1	70-130/25
75-00-3	Chloroethane	50	49.6	99	49.7	99	0	70-130/25
67-66-3	Chloroform	50	51.8	104	52.3	105	1	70-130/25
74-87-3	Chloromethane	50	44.4	89	43.5	87	2	70-130/25
95-49-8	o-Chlorotoluene	50	59.4	119	59.3	119	0	70-130/25
106-43-4	p-Chlorotoluene	50	57.1	114	56.6	113	1	70-130/25
96-12-8	1,2-Dibromo-3-chloropropane	50	49.2	98	49.6	99	1	70-130/25
124-48-1	Dibromochloromethane	50	56.2	112	55.3	111	2	70-130/25
106-93-4	1,2-Dibromoethane	50	54.3	109	52.3	105	4	70-130/25
95-50-1	1,2-Dichlorobenzene	50	55.9	112	55.1	110	1	70-130/25
541-73-1	1,3-Dichlorobenzene	50	55.5	111	54.0	108	3	70-130/25
106-46-7	1,4-Dichlorobenzene	50	54.5	109	54.4	109	0	70-130/25
75-71-8	Dichlorodifluoromethane	50	41.0	82	41.2	82	0	70-130/25
75-34-3	1,1-Dichloroethane	50	54.8	110	56.4	113	3	70-130/25
107-06-2	1,2-Dichloroethane	50	51.7	103	53.3	107	3	70-130/25
75-35-4	1,1-Dichloroethene	50	47.3	95	48.1	96	2	70-130/25
156-59-2	cis-1,2-Dichloroethene	50	52.8	106	53.5	107	1	70-130/25
156-60-5	trans-1,2-Dichloroethene	50	53.1	106	54.7	109	3	70-130/25
78-87-5	1,2-Dichloropropane	50	54.2	108	55.3	111	2	70-130/25
142-28-9	1,3-Dichloropropane	50	52.4	105	51.9	104	1	70-130/25
594-20-7	2,2-Dichloropropane	50	61.0	122	60.8	122	0	70-130/25
563-58-6	1,1-Dichloropropene	50	54.7	109	56.8	114	4	70-130/25
10061-01-5	cis-1,3-Dichloropropene	50	52.4	105	53.2	106	2	70-130/25

Blank Spike/Blank Spike Duplicate Summary

Page 2 of 3

Job Number: M85952

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN1374-BS	N36766.D	1	09/24/09	WC	n/a	n/a	MSN1374
MSN1374-BSD	N36767.D	1	09/24/09	WC	n/a	n/a	MSN1374

The QC reported here applies to the following samples:

Method: SW846 8260B

M85952-1, M85952-3, M85952-5, M85952-7, M85952-9, M85952-11, M85952-13, M85952-15, M85952-17

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	50	55.2	110	56.0	112	1	70-130/25
100-41-4	Ethylbenzene	50	57.0	114	56.4	113	1	70-130/25
76-13-1	Freon 113	50	57.0	114	56.1	112	2	70-130/25
87-68-3	Hexachlorobutadiene	50	58.3	117	57.2	114	2	70-130/25
591-78-6	2-Hexanone	50	55.5	111	54.6	109	2	70-130/25
98-82-8	Isopropylbenzene	50	67.2	134* a	68.5	137* a	2	70-130/25
99-87-6	p-Isopropyltoluene	50	58.2	116	57.8	116	1	70-130/25
1634-04-4	Methyl Tert Butyl Ether	50	48.0	96	48.2	96	0	70-130/25
108-10-1	4-Methyl-2-pentanone (MIBK)	50	49.0	98	49.0	98	0	70-130/25
74-95-3	Methylene bromide	50	54.6	109	54.2	108	1	70-130/25
75-09-2	Methylene chloride	50	52.8	106	53.5	107	1	70-130/25
91-20-3	Naphthalene	50	61.0	122	59.4	119	3	70-130/25
103-65-1	n-Propylbenzene	50	57.5	115	57.5	115	0	70-130/25
100-42-5	Styrene	50	50.1	100	49.6	99	1	70-130/25
630-20-6	1,1,1,2-Tetrachloroethane	50	54.4	109	53.3	107	2	70-130/25
79-34-5	1,1,2,2-Tetrachloroethane	50	57.7	115	56.9	114	1	70-130/25
127-18-4	Tetrachloroethene	50	53.7	107	52.2	104	3	70-130/25
109-99-9	Tetrahydrofuran	50	52.8	106	52.5	105	1	70-130/25
108-88-3	Toluene	50	53.3	107	54.4	109	2	70-130/25
110-57-6	Trans-1,4-Dichloro-2-Butene	50	59.8	120	57.0	114	5	70-130/25
87-61-6	1,2,3-Trichlorobenzene	50	56.7	113	55.2	110	3	70-130/25
120-82-1	1,2,4-Trichlorobenzene	50	57.5	115	58.5	117	2	70-130/25
71-55-6	1,1,1-Trichloroethane	50	52.4	105	52.2	104	0	70-130/25
79-00-5	1,1,2-Trichloroethane	50	53.1	106	54.4	109	2	70-130/25
79-01-6	Trichloroethene	50	51.0	102	53.0	106	4	70-130/25
75-69-4	Trichlorofluoromethane	50	50.7	101	52.1	104	3	70-130/25
96-18-4	1,2,3-Trichloropropane	50	53.0	106	53.2	106	0	70-130/25
95-63-6	1,2,4-Trimethylbenzene	50	58.7	117	59.0	118	1	70-130/25
108-67-8	1,3,5-Trimethylbenzene	50	59.8	120	59.5	119	1	70-130/25
75-01-4	Vinyl chloride	50	53.1	106	52.7	105	1	70-130/25
	m,p-Xylene	100	117	117	116	116	1	70-130/25
95-47-6	o-Xylene	50	59.0	118	58.5	117	1	70-130/25

Blank Spike/Blank Spike Duplicate Summary

Page 3 of 3

Job Number: M85952

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN1374-BS	N36766.D	1	09/24/09	WC	n/a	n/a	MSN1374
MSN1374-BSD	N36767.D	1	09/24/09	WC	n/a	n/a	MSN1374

The QC reported here applies to the following samples:

Method: SW846 8260B

M85952-1, M85952-3, M85952-5, M85952-7, M85952-9, M85952-11, M85952-13, M85952-15, M85952-17

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	100%	100%	70-130%
2037-26-5	Toluene-D8	101%	102%	70-130%
460-00-4	4-Bromofluorobenzene	109%	110%	70-130%

(a) Outside control limits. Associated samples are non-detect for this compound.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: M85952

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M86025-7MS	N36784.D	5	09/24/09	WC	n/a	n/a	MSN1374
M86025-7MSD	N36785.D	5	09/24/09	WC	n/a	n/a	MSN1374
M86025-7	N36783.D	1	09/24/09	WC	n/a	n/a	MSN1374

The QC reported here applies to the following samples:

Method: SW846 8260B

M85952-1, M85952-3, M85952-5, M85952-7, M85952-9, M85952-11, M85952-13, M85952-15, M85952-17

CAS No.	Compound	M86025-7 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	250	186	74	199	80	7	70-130/30
107-13-1	Acrylonitrile	ND	1250	1350	108	1330	106	1	70-130/30
71-43-2	Benzene	ND	250	270	108	266	106	1	70-130/30
108-86-1	Bromobenzene	ND	250	256	102	276	110	8	70-130/30
75-27-4	Bromodichloromethane	ND	250	279	112	273	109	2	70-130/30
75-25-2	Bromoform	ND	250	290	116	287	115	1	70-130/30
74-83-9	Bromomethane	ND	250	237	95	247	99	4	70-130/30
78-93-3	2-Butanone (MEK)	ND	250	220	88	220	88	0	70-130/30
104-51-8	n-Butylbenzene	ND	250	259	104	272	109	5	70-130/30
135-98-8	sec-Butylbenzene	ND	250	274	110	297	119	8	70-130/30
98-06-6	tert-Butylbenzene	ND	250	241	96	265	106	9	70-130/30
75-15-0	Carbon disulfide	ND	250	270	108	260	104	4	70-130/30
56-23-5	Carbon tetrachloride	ND	250	263	105	260	104	1	70-130/30
108-90-7	Chlorobenzene	ND	250	263	105	262	105	0	70-130/30
75-00-3	Chloroethane	ND	250	252	101	239	96	5	70-130/30
67-66-3	Chloroform	ND	250	260	104	257	103	1	70-130/30
74-87-3	Chloromethane	ND	250	194	78	228	91	16	70-130/30
95-49-8	o-Chlorotoluene	ND	250	261	104	287	115	9	70-130/30
106-43-4	p-Chlorotoluene	ND	250	259	104	276	110	6	70-130/30
96-12-8	1,2-Dibromo-3-chloropropane	ND	250	228	91	244	98	7	70-130/30
124-48-1	Dibromochloromethane	ND	250	290	116	287	115	1	70-130/30
106-93-4	1,2-Dibromoethane	ND	250	277	111	276	110	0	70-130/30
95-50-1	1,2-Dichlorobenzene	ND	250	261	104	278	111	6	70-130/30
541-73-1	1,3-Dichlorobenzene	ND	250	259	104	274	110	6	70-130/30
106-46-7	1,4-Dichlorobenzene	ND	250	257	103	266	106	3	70-130/30
75-71-8	Dichlorodifluoromethane	ND	250	228	91	218	87	4	70-130/30
75-34-3	1,1-Dichloroethane	ND	250	277	111	270	108	3	70-130/30
107-06-2	1,2-Dichloroethane	ND	250	262	105	259	104	1	70-130/30
75-35-4	1,1-Dichloroethene	ND	250	242	97	235	94	3	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND	250	269	108	264	106	2	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND	250	265	106	258	103	3	70-130/30
78-87-5	1,2-Dichloropropane	ND	250	276	110	270	108	2	70-130/30
142-28-9	1,3-Dichloropropane	ND	250	271	108	266	106	2	70-130/30
594-20-7	2,2-Dichloropropane	ND	250	301	120	297	119	1	70-130/30
563-58-6	1,1-Dichloropropene	ND	250	277	111	274	110	1	70-130/30
10061-01-5	cis-1,3-Dichloropropene	ND	250	251	100	258	103	3	70-130/30

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: M85952
Account: LEA Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M86025-7MS	N36784.D	5	09/24/09	WC	n/a	n/a	MSN1374
M86025-7MSD	N36785.D	5	09/24/09	WC	n/a	n/a	MSN1374
M86025-7	N36783.D	1	09/24/09	WC	n/a	n/a	MSN1374

The QC reported here applies to the following samples:

Method: SW846 8260B

M85952-1, M85952-3, M85952-5, M85952-7, M85952-9, M85952-11, M85952-13, M85952-15, M85952-17

CAS No.	Compound	M86025-7 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	ND	250	264	106	270	108	2	70-130/30
100-41-4	Ethylbenzene	ND	250	280	112	281	112	0	70-130/30
76-13-1	Freon 113	ND	250	313	125	302	121	4	70-130/30
87-68-3	Hexachlorobutadiene	ND	250	269	108	288	115	7	70-130/30
591-78-6	2-Hexanone	ND	250	229	92	250	100	9	70-130/30
98-82-8	Isopropylbenzene	ND	250	303	121	333	133* a	9	70-130/30
99-87-6	p-Isopropyltoluene	ND	250	271	108	291	116	7	70-130/30
1634-04-4	Methyl Tert Butyl Ether	ND	250	230	92	230	92	0	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	250	223	89	229	92	3	70-130/30
74-95-3	Methylene bromide	ND	250	278	111	278	111	0	70-130/30
75-09-2	Methylene chloride	ND	250	269	108	263	105	2	70-130/30
91-20-3	Naphthalene	ND	250	245	98	286	114	15	70-130/30
103-65-1	n-Propylbenzene	ND	250	261	104	280	112	7	70-130/30
100-42-5	Styrene	ND	250	253	101	250	100	1	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND	250	282	113	278	111	1	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND	250	263	105	280	112	6	70-130/30
127-18-4	Tetrachloroethene	ND	250	290	116	279	112	4	70-130/30
109-99-9	Tetrahydrofuran	ND	250	243	97	241	96	1	70-130/30
108-88-3	Toluene	ND	250	270	108	270	108	0	70-130/30
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	250	267	107	281	112	5	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND	250	242	97	272	109	12	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND	250	260	104	281	112	8	70-130/30
71-55-6	1,1,1-Trichloroethane	ND	250	262	105	256	102	2	70-130/30
79-00-5	1,1,2-Trichloroethane	ND	250	269	108	269	108	0	70-130/30
79-01-6	Trichloroethene	ND	250	270	108	266	106	1	70-130/30
75-69-4	Trichlorofluoromethane	ND	250	274	110	266	106	3	70-130/30
96-18-4	1,2,3-Trichloropropane	ND	250	233	93	257	103	10	70-130/30
95-63-6	1,2,4-Trimethylbenzene	ND	250	269	108	290	116	8	70-130/30
108-67-8	1,3,5-Trimethylbenzene	ND	250	272	109	295	118	8	70-130/30
75-01-4	Vinyl chloride	ND	250	264	106	261	104	1	70-130/30
	m,p-Xylene	ND	500	593	119	600	120	1	70-130/30
95-47-6	o-Xylene	ND	250	303	121	300	120	1	70-130/30

Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: M85952

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M86025-7MS	N36784.D	5	09/24/09	WC	n/a	n/a	MSN1374
M86025-7MSD	N36785.D	5	09/24/09	WC	n/a	n/a	MSN1374
M86025-7	N36783.D	1	09/24/09	WC	n/a	n/a	MSN1374

The QC reported here applies to the following samples:

Method: SW846 8260B

M85952-1, M85952-3, M85952-5, M85952-7, M85952-9, M85952-11, M85952-13, M85952-15, M85952-17

CAS No.	Surrogate Recoveries	MS	MSD	M86025-7	Limits
1868-53-7	Dibromofluoromethane	100%	99%	108%	70-130%
2037-26-5	Toluene-D8	100%	102%	97%	70-130%
460-00-4	4-Bromofluorobenzene	99%	107%	89%	70-130%

(a) Outside control limits. Associated samples are non-detect for this compound.

Volatile Internal Standard Area Summary

Page 1 of 1

Job Number: M85952
Account: LEA Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

Check Std: MSN1374-CC1367
Lab File ID: N36765.D
Instrument ID: GCMSN
Injection Date: 09/24/09
Injection Time: 09:31
Method: SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	111247	8.64	201491	9.50	117731	12.75	73740	15.31	71072	6.22
Upper Limit ^a	222494	9.14	402982	10.00	235462	13.25	147480	15.81	142144	6.72
Lower Limit ^b	55624	8.14	100746	9.00	58866	12.25	36870	14.81	35536	5.72

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSN1374-BS	119398	8.64	217972	9.50	117879	12.75	70721	15.31	78359	6.22
MSN1374-BSD	120755	8.64	219428	9.50	122138	12.75	72577	15.31	78847	6.22
MSN1374-MB	111061	8.64	206627	9.50	96118	12.75	65751	15.31	74278	6.23
ZZZZZZ	112088	8.64	199981	9.50	95084	12.76	59584	15.31	77634	6.23
ZZZZZZ	105215	8.64	193585	9.50	89201	12.75	60132	15.31	70464	6.23
ZZZZZZ	107096	8.64	196095	9.50	90119	12.75	59498	15.31	72486	6.23
M85952-1	101400	8.64	187149	9.50	88806	12.75	58712	15.31	67750	6.23
M85952-3	101979	8.64	188020	9.50	88443	12.75	59603	15.31	70955	6.22
M85952-5	99082	8.64	185568	9.50	86535	12.75	57647	15.31	71703	6.23
M85952-7	97861	8.64	184638	9.50	84791	12.75	58276	15.31	82375	6.22
M85952-9	96444	8.64	181460	9.50	85520	12.75	57166	15.31	67330	6.22
M85952-11	94385	8.64	178675	9.50	82630	12.75	54721	15.31	65957	6.23
M85952-13	94423	8.64	178049	9.50	83077	12.75	57304	15.31	57829	6.23
M85952-15	94108	8.64	176200	9.50	81143	12.75	54556	15.31	61303	6.22
M85952-17	91607	8.64	175694	9.50	81038	12.75	55438	15.31	65434	6.23
ZZZZZZ	91012	8.64	172442	9.50	79422	12.75	54950	15.31	60365	6.22
M86025-7	90980	8.64	173323	9.50	83253	12.75	57324	15.31	62942	6.23
M86025-7MS	101686	8.64	183431	9.50	98058	12.75	66683	15.31	59724	6.22
M86025-7MSD	107779	8.64	192376	9.50	103118	12.75	63582	15.31	64942	6.22

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Page 1 of 1

Job Number: M85952

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Method: SW846 8260B

Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
M85952-1	N36773.D	104.0	97.0	90.0
M85952-3	N36774.D	103.0	97.0	90.0
M85952-5	N36775.D	105.0	96.0	87.0
M85952-7	N36776.D	106.0	94.0	87.0
M85952-9	N36777.D	106.0	96.0	91.0
M85952-11	N36778.D	108.0	96.0	89.0
M85952-13	N36779.D	106.0	96.0	90.0
M85952-15	N36780.D	104.0	96.0	88.0
M85952-17	N36781.D	107.0	96.0	88.0
M86025-7MS	N36784.D	100.0	100.0	99.0
M86025-7MSD	N36785.D	99.0	102.0	107.0
MSN1374-BS	N36766.D	100.0	101.0	109.0
MSN1374-BSD	N36767.D	100.0	102.0	110.0
MSN1374-MB	N36769.D	100.0	95.0	92.0

Surrogate Compounds

Recovery Limits

S1 = Dibromofluoromethane

70-130%

S2 = Toluene-D8

70-130%

S3 = 4-Bromofluorobenzene

70-130%



GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Page 1 of 1

Job Number: M85952
Account: LEA Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19559-MB	BC32386.D	1	10/01/09	KD	09/24/09	OP19559	GBC1691

The QC reported here applies to the following samples:

Method: CT-ETPH 7/06

M85952-1, M85952-3, M85952-5, M85952-7, M85952-9, M85952-11, M85952-13, M85952-15

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	ND	0.080	mg/l	

CAS No.	Surrogate Recoveries	Limits
3386-33-2	1-Chlorooctadecane	91% 50-149%

Method Blank Summary

Page 1 of 1

Job Number: M85952

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19558-MB	EF70466.D	1	09/29/09	SL	09/24/09	OP19558	GEF3240

The QC reported here applies to the following samples:

Method: SW846 8082

M85952-1, M85952-3, M85952-5, M85952-7, M85952-9, M85952-11, M85952-13, M85952-15

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	91% 30-150%
877-09-8	Tetrachloro-m-xylene	88% 30-150%
2051-24-3	Decachlorobiphenyl	52% 30-150%
2051-24-3	Decachlorobiphenyl	52% 30-150%

Blank Spike Summary

Page 1 of 1

Job Number: M85952
Account: LEA Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19559-BS	BC32388.D	1	10/01/09	KD	09/24/09	OP19559	GBC1691

The QC reported here applies to the following samples:

Method: CT-ETPH 7/06

M85952-1, M85952-3, M85952-5, M85952-7, M85952-9, M85952-11, M85952-13, M85952-15

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	CT-DRO (C9-C36)	0.7	0.666	95	60-120

CAS No.	Surrogate Recoveries	BSP	Limits
3386-33-2	1-Chlorooctadecane	112%	50-149%

6.2.1

6

Blank Spike Summary

Page 1 of 1

Job Number: M85952

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19558-BS	EF70467.D	1	09/29/09	SL	09/24/09	OP19558	GEF3240

The QC reported here applies to the following samples:

Method: SW846 8082

M85952-1, M85952-3, M85952-5, M85952-7, M85952-9, M85952-11, M85952-13, M85952-15

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
12674-11-2	Aroclor 1016	2	2.1	105	40-140
11104-28-2	Aroclor 1221		ND		40-140
11141-16-5	Aroclor 1232		ND		40-140
53469-21-9	Aroclor 1242		ND		40-140
12672-29-6	Aroclor 1248		ND		40-140
11097-69-1	Aroclor 1254		ND		40-140
11096-82-5	Aroclor 1260	2	2.2	110	40-140
37324-23-5	Aroclor 1262		ND		40-140
11100-14-4	Aroclor 1268		ND		40-140

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	101%	30-150%
877-09-8	Tetrachloro-m-xylene	99%	30-150%
2051-24-3	Decachlorobiphenyl	58%	30-150%
2051-24-3	Decachlorobiphenyl	60%	30-150%

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: M85952

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19559-MS	BC32390.D	1	10/01/09	KD	09/24/09	OP19559	GBC1691
OP19559-MSD	BC32392.D	1	10/01/09	KD	09/24/09	OP19559	GBC1691
M86006-18	BC32394.D	1	10/01/09	KD	09/24/09	OP19559	GBC1691

The QC reported here applies to the following samples:

Method: CT-ETPH 7/06

M85952-1, M85952-3, M85952-5, M85952-7, M85952-9, M85952-11, M85952-13, M85952-15

CAS No.	Compound	M86006-18 mg/l	Spike Q	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	CT-DRO (C9-C36)	0.143	0.7	0.740	85	0.678	76	9	50-129/26

CAS No.	Surrogate Recoveries	MS	MSD	M86006-18	Limits
3386-33-2	1-Chlorooctadecane	98%	97%	102%	50-149%

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: M85952

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19558-MS	EF70468A.D	1	09/29/09	SL	09/24/09	OP19558	GEF3240
OP19558-MSD	EF70469.D	1	09/29/09	SL	09/24/09	OP19558	GEF3240
M86006-19	EF70470.D	1	09/29/09	SL	09/24/09	OP19558	GEF3240

The QC reported here applies to the following samples:

Method: SW846 8082

M85952-1, M85952-3, M85952-5, M85952-7, M85952-9, M85952-11, M85952-13, M85952-15

CAS No.	Compound	M86006-19 ug/l	Spike Q	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND	2	2.2	110	2.4	120	9	40-140/50
11104-28-2	Aroclor 1221	ND		ND		ND		nc	40-140/50
11141-16-5	Aroclor 1232	ND		ND		ND		nc	40-140/50
53469-21-9	Aroclor 1242	ND		ND		ND		nc	40-140/50
12672-29-6	Aroclor 1248	ND		ND		ND		nc	40-140/50
11097-69-1	Aroclor 1254	ND		ND		ND		nc	40-140/50
11096-82-5	Aroclor 1260	ND	2	2.3	115	2.5	125	8	40-140/50
37324-23-5	Aroclor 1262	ND		ND		ND		nc	40-140/50
11100-14-4	Aroclor 1268	ND		ND		ND		nc	40-140/50

CAS No.	Surrogate Recoveries	MS	MSD	M86006-19	Limits
877-09-8	Tetrachloro-m-xylene	102%	109%	101%	30-150%
877-09-8	Tetrachloro-m-xylene	101%	107%	98%	30-150%
2051-24-3	Decachlorobiphenyl	69%	69%	63%	30-150%
2051-24-3	Decachlorobiphenyl	71%	71%	67%	30-150%

Semivolatile Surrogate Recovery Summary

Page 1 of 1

Job Number: M85952

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Method: CT-ETPH 7/06

Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a
M85952-1	BC32396.D	97.0
M85952-3	BC32398.D	93.0
M85952-5	BC32400.D	92.0
M85952-7	BC32402.D	94.0
M85952-9	BC32404.D	126.0
M85952-11	BC32408.D	111.0
M85952-13	BC32410.D	92.0
M85952-15	BC32412.D	70.0
OP19559-BS	BC32388.D	112.0
OP19559-MB	BC32386.D	91.0
OP19559-MS	BC32390.D	98.0
OP19559-MSD	BC32392.D	97.0

Surrogate Compounds	Recovery Limits
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S1 = 1-Chlorooctadecane	50-149%
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(a) Recovery from GC signal #1

6.4.1

6

Semivolatile Surrogate Recovery Summary

Page 1 of 1

Job Number: M85952

Account: LEA Loureiro Eng. Associates

Project: UTC:2009 Quarterly GW-F&H Buildings

Method: SW846 8082

Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S1 ^b	S2 ^a	S2 ^b
M85952-1	EF70471.D	99.0	98.0	98.0	104.0
M85952-3	EF70472.D	92.0	89.0	91.0	94.0
M85952-5	EF70473.D	108.0	107.0	94.0	98.0
M85952-7	EF70474.D	106.0	105.0	96.0	101.0
M85952-9	EF70475.D	108.0	106.0	80.0	83.0
M85952-11	EF70477.D	96.0	92.0	79.0	82.0
M85952-13	EF70478.D	90.0	90.0	78.0	81.0
M85952-15	EF70479.D	82.0	80.0	43.0	44.0
OP19558-BS	EF70467.D	101.0	99.0	58.0	60.0
OP19558-MB	EF70466.D	91.0	88.0	52.0	52.0
OP19558-MS	EF70468A.D	102.0	101.0	69.0	71.0
OP19558-MSD	EF70469.D	109.0	107.0	69.0	71.0

Surrogate Compounds

Recovery Limits

S1 = Tetrachloro-m-xylene

30-150%

S2 = Decachlorobiphenyl

30-150%

(a) Recovery from GC signal #1

(b) Recovery from GC signal #2

6.4.2

6



IT'S ALL IN THE CHEMISTRY

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M85952
Account: LEA - Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

QC Batch ID: MP14130
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 09/21/09

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	27	40		
Antimony	6.0	1.4	1.6		
Arsenic	10	1	1.8	-0.30	<10
Barium	200	.57	1.1	2.3	<200
Beryllium	4.0	.15	.4		
Boron	100	.65	2.3		
Cadmium	4.0	.24	1.9	0.0	<4.0
Calcium	5000	7.6	15		
Chromium	10	.81	1.1	-0.20	<10
Cobalt	50	.25	.3		
Copper	25	2.2	4	0.40	<25
Gold	50	1.1	4.2		
Iron	100	3.7	13		
Lead	5.0	1.1	2.7	-0.30	<5.0
Magnesium	5000	37	77		
Manganese	15	.12	1.1		
Molybdenum	100	.22	.8		
Nickel	40	.24	1.3	0.0	<40
Palladium	50	2.2	4		
Platinum	50	9.3	13		
Potassium	5000	39	46		
Selenium	10	1.9	3.5	0.40	<10
Silicon	100	8.9	36		
Silver	5.0	.54	1.3	-0.10	<5.0
Sodium	5000	61	160		
Strontium	10	.24	.3		
Thallium	10	1.2	1.3		
Tin	100	.65	1.3		
Titanium	50	.74	.8		
Tungsten	100	5.6	8		
Vanadium	30	.68	1.6		
Zinc	20	.74	1.5	0.80	<20

Associated samples MP14130: M85952-2, M85952-4, M85952-6, M85952-8, M85952-10, M85952-12, M85952-14, M85952-16

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M85952
Account: LEA - Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

QC Batch ID: MP14130
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

7.1.1

7

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M85952
 Account: LEA - Loureiro Eng. Associates
 Project: UTC:2009 Quarterly GW-F&H Buildings

QC Batch ID: MP14130
 Matrix Type: AQUEOUS

Methods: SW846 6010B
 Units: ug/l

Prep Date: 09/21/09 09/21/09

Metal	M85952-2 Original MS		Spikelot MPICP	% Rec	QC Limits	M85952-2 Original DUP		RPD	QC Limits
Aluminum									
Antimony									
Arsenic	0.0	516	500	103.2	75-125	0.0	0.0	NC	0-20
Barium	140	2150	2000	100.5	75-125	140	143	2.1	0-20
Beryllium									
Boron									
Cadmium	0.0	509	500	101.8	75-125	0.0	0.0	NC	0-20
Calcium									
Chromium	0.0	486	500	97.2	75-125	0.0	0.0	NC	0-20
Cobalt									
Copper	0.0	491	500	98.2	75-125	0.0	0.0	NC	0-20
Gold									
Iron									
Lead	0.0	963	1000	96.3	75-125	0.0	0.0	NC	0-20
Magnesium									
Manganese									
Molybdenum									
Nickel	1.7	488	500	97.3	75-125	1.7	1.8	5.7	0-20
Palladium									
Platinum									
Potassium									
Selenium	0.0	522	500	104.4	75-125	0.0	0.0	NC	0-20
Silicon									
Silver	0.0	219	200	109.5	75-125	0.0	0.0	NC	0-20
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Tungsten									
Vanadium									
Zinc	1.6	499	500	99.5	75-125	1.6	1.2	28.6 (a)	0-20

Associated samples MP14130: M85952-2, M85952-4, M85952-6, M85952-8, M85952-10, M85952-12, M85952-14, M85952-16

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M85952
Account: LEA - Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

QC Batch ID: MP14130
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) RPD acceptable due to low duplicate and sample concentrations.

7.1.2

7

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M85952
 Account: LEA - Loureiro Eng. Associates
 Project: UTC:2009 Quarterly GW-F&H Buildings

QC Batch ID: MP14130
 Matrix Type: AQUEOUS

Methods: SW846 6010B
 Units: ug/l

Prep Date: 09/21/09

09/21/09

Metal	BSP Result	Spikelot MPICP	% Rec	QC Limits	BSD Result	Spikelot MPICP	% Rec	BSD RPD	QC Limit
Aluminum									
Antimony									
Arsenic	504	500	100.8	80-120	519	500	103.8	2.9	20
Barium	1950	2000	97.5	80-120	2050	2000	102.5	5.0	20
Beryllium									
Boron									
Cadmium	500	500	100.0	80-120	507	500	101.4	1.4	20
Calcium									
Chromium	478	500	95.6	80-120	478	500	95.6	0.0	20
Cobalt									
Copper	485	500	97.0	80-120	481	500	96.2	0.8	20
Gold									
Iron									
Lead	954	1000	95.4	80-120	984	1000	98.4	3.1	20
Magnesium									
Manganese									
Molybdenum									
Nickel	479	500	95.8	80-120	496	500	99.2	3.5	20
Palladium									
Platinum									
Potassium									
Selenium	512	500	102.4	80-120	521	500	104.2	1.7	20
Silicon									
Silver	213	200	106.5	80-120	212	200	106.0	0.5	20
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Tungsten									
Vanadium									
Zinc	497	500	99.4	80-120	502	500	100.4	1.0	20

Associated samples MP14130: M85952-2, M85952-4, M85952-6, M85952-8, M85952-10, M85952-12, M85952-14, M85952-16

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M85952
Account: LEA - Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

QC Batch ID: MP14130
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: M85952
 Account: LEA - Loureiro Eng. Associates
 Project: UTC:2009 Quarterly GW-F&H Buildings

QC Batch ID: MP14130
 Matrix Type: AQUEOUS

Methods: SW846 6010B
 Units: ug/l

Prep Date: 09/21/09

Metal	M85952-2 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic	0.00	0.00	NC	0-10
Barium	140	147	5.4	0-10
Beryllium				
Boron				
Cadmium	0.00	0.00	NC	0-10
Calcium				
Chromium	0.00	0.00	NC	0-10
Cobalt				
Copper	0.00	0.00	NC	0-10
Gold				
Iron				
Lead	0.00	0.00	NC	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel	1.70	1.30	23.5 (a)	0-10
Palladium				
Platinum				
Potassium				
Selenium	0.00	0.00	NC	0-10
Silicon				
Silver	0.00	0.00	NC	0-10
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium				
Zinc	1.60	0.00	100.0 (a)	0-10

Associated samples MP14130: M85952-2, M85952-4, M85952-6, M85952-8, M85952-10, M85952-12, M85952-14, M85952-16

SERIAL DILUTION RESULTS SUMMARY

Login Number: M85952
Account: LEA - Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

QC Batch ID: MP14130
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

7.1.4

7

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M85952
Account: LEA - Loureiro Eng. Associates
Project: UTC:2009 Quarterly GW-F&H Buildings

QC Batch ID: MP14137
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 09/22/09

Metal	RL	IDL	MDL	MB raw	final
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Mercury	0.20	.035	.048	0.021	<0.20
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Associated samples MP14137: M85952-2, M85952-4, M85952-6, M85952-8, M85952-10, M85952-12, M85952-14, M85952-16

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M85952
 Account: LEA - Loureiro Eng. Associates
 Project: UTC:2009 Quarterly GW-F&H Buildings

QC Batch ID: MP14137
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 09/22/09 09/22/09

Metal	M85952-2 Original MS		Spikelot HGRWS1	% Rec	QC Limits	M85952-2 Original DUP		RPD	QC Limits
Mercury	0.0	2.7	3	90.0	75-125	0.0	0.0	NC	0-20

Associated samples MP14137: M85952-2, M85952-4, M85952-6, M85952-8, M85952-10, M85952-12, M85952-14, M85952-16

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

7.2.2

7

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M85952
 Account: LEA - Loureiro Eng. Associates
 Project: UTC:2009 Quarterly GW-F&H Buildings

QC Batch ID: MP14137
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 09/22/09

09/22/09

Metal	BSP Result	Spikelot HGRWS1	% Rec	QC Limits	BSD Result	Spikelot HGRWS1	% Rec	BSD RPD	QC Limit
Mercury	2.9	3	96.7	80-120	3.0	3	100.0	3.4	20

Associated samples MP14137: M85952-2, M85952-4, M85952-6, M85952-8, M85952-10, M85952-12, M85952-14, M85952-16

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested



12/31/09

IT'S ALL IN THE CHEMISTRY

12/31/09

Technical Report for

Loureiro Eng. Associates

UTC: F&H Post Remediation GW Monitoring

88UT908

Accutest Job Number: M87885

Sampling Date: 12/07/09

Report to:

nsemmons@loureiro.com

Total number of pages in report: **101**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.


Reza Fand
Lab Director

Client Service contact: Kristen Blanchard 508-481-6200

Certifications: MA (M-MA136) CT (PH-0109) NH (2502) RI (00071) ME (MA0136) FL (E87579)
NY (11791) NJ (MA926) NC (653) IL (200018) NAVY USACE

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Test results relate only to samples analyzed.

Table of Contents

-1-

Section 1: Sample Summary	3
Section 2: Case Narrative/Conformance Summary	5
Section 3: Sample Results	7
3.1: M87885-1: 1136034	8
3.2: M87885-2: 1136034UF	13
3.3: M87885-3: 1136035	14
3.4: M87885-4: 1136035UF	19
3.5: M87885-5: 1136036	20
3.6: M87885-6: 1136036UF	25
3.7: M87885-7: 1136037	26
3.8: M87885-8: 1136037UF	31
3.9: M87885-9: 1136038	32
3.10: M87885-10: 1136030	35
3.11: M87885-11: 1136030UF	40
3.12: M87885-12: 1136033	41
3.13: M87885-13: 1136033UF	46
3.14: M87885-14: 1136031	47
3.15: M87885-15: 1136031UF	52
3.16: M87885-16: 1136032	53
3.17: M87885-17: 1136032UF	58
Section 4: Misc. Forms	59
4.1: Certification Exceptions	60
4.2: Chain of Custody	61
4.3: RCP Form	64
4.4: Sample Tracking Chronicle	65
Section 5: GC/MS Volatiles - QC Data Summaries	68
5.1: Method Blank Summary	69
5.2: Blank Spike/Blank Spike Duplicate Summary	72
5.3: Matrix Spike/Matrix Spike Duplicate Summary	75
5.4: Internal Standard Area Summaries	78
5.5: Surrogate Recovery Summaries	80
Section 6: GC Semi-volatiles - QC Data Summaries	81
6.1: Method Blank Summary	82
6.2: Blank Spike Summary	84
6.3: Matrix Spike/Matrix Spike Duplicate Summary	86
6.4: Surrogate Recovery Summaries	88
Section 7: Metals Analysis - QC Data Summaries	90
7.1: Prep QC MP14558: As,Ba,Cd,Cr,Cu,Pb,Ni,Se,Ag,Zn	91
7.2: Prep QC MP14563: Hg	99



Sample Summary

Loureiro Eng. Associates

Job No: M87885

UTC: F&H Post Remediation GW Monitoring
Project No: 88UT908

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
M87885-1	12/07/09	10:35 NE	12/07/09	AQ	Ground Water	1136034
M87885-2	12/07/09	10:35 NE	12/07/09	AQ	Ground Water	1136034UF
M87885-3	12/07/09	13:05 NE	12/07/09	AQ	Ground Water	1136035
M87885-4	12/07/09	13:05 NE	12/07/09	AQ	Ground Water	1136035UF
M87885-5	12/07/09	00:00 NE	12/07/09	AQ	Ground Water	1136036
M87885-6	12/07/09	00:00 NE	12/07/09	AQ	Ground Water	1136036UF
M87885-7	12/07/09	14:30 NE	12/07/09	AQ	Ground Water	1136037
M87885-8	12/07/09	14:30 NE	12/07/09	AQ	Ground Water	1136037UF
M87885-9	12/07/09	09:45 NE	12/07/09	AQ	Ground Water	1136038
M87885-10	12/07/09	09:50 NE	12/07/09	AQ	Ground Water	1136030
M87885-11	12/07/09	09:50 NE	12/07/09	AQ	Ground Water	1136030UF
M87885-12	12/07/09	09:50 NE	12/07/09	AQ	Ground Water	1136033
M87885-13	12/07/09	09:50 NE	12/07/09	AQ	Ground Water	1136033UF



Sample Summary
(continued)

Loureiro Eng. Associates

Job No: M87885

UTC: F&H Post Remediation GW Monitoring
Project No: 88UT908

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
M87885-14	12/07/09	09:50 NE	12/07/09	AQ	Ground Water	1136031
M87885-15	12/07/09	12:10 NE	12/07/09	AQ	Ground Water	1136031UF
M87885-16	12/07/09	13:50 NE	12/07/09	AQ	Ground Water	1136032
M87885-17	12/07/09	13:50 NE	12/07/09	AQ	Ground Water	1136032UF

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Loureiro Eng. Associates

Job No M87885

Site: UTC: F&H Post Remediation GW Monitoring

Report Date 12/21/2009 10:00:33 AM

17 Sample(s) were collected on 12/07/2009 and were received at Accutest on 12/07/2009 properly preserved, at 1.2 Deg. C and intact. These Samples received an Accutest job number of M87885. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix AQ	Batch ID: MSP1417
------------------	--------------------------

- M87885-14: Confirmation run for internal standard areas.

Matrix AQ	Batch ID: MSP1418
------------------	--------------------------

- All samples were analyzed within the recommended method holding time.
- Sample(s) M87885-3MS, M87885-3MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for Dichlorodifluoromethane are outside control limits. Blank Spike meets program technical requirements.
- Matrix Spike Recovery(s) for Naphthalene are outside control limits. Outside control limits due to possible matrix interference. Refer to Blank Spike.
- Matrix Spike Duplicate Recovery(s) for Chloromethane, 2-Butanone (MEK) are outside control limits. Outside control limits due to possible matrix interference. Refer to Blank Spike.
- RPD(s) for MSD for 2-Butanone (MEK), Naphthalene are outside control limits for sample M87885-3MSD. High RPD due to possible matrix interference and/or sample non-homogeneity.
- RPD for M87885-3MSD for Acetone: Outside control limits. Blank Spike meets program technical requirements.
- M87885-3MS for Dichlorodifluoromethane: Outside control limits. Blank Spike meets program technical requirements.
- Initial calibration standard in batch MSP1415 for vinyl chloride, naphthalene is employed quadratic regression Initial calibration verification MSP1415-ICV1415 for acetone exceeds 35% Difference.
- RPD for MSP1418-BSD for acetone, 2,2-Dichloropropane: Outside control limits. Blank Spike meets program technical requirements.
- Continuing calibration check standard for Dichlorodifluoromethane exceed 30% Difference. This check standard met RCP criteria.
- M87885-14 has internal standard outside control limits. Outside control limits due to possible matrix interference. Confirmed by reanalysis.
- BSD Recovery(s) for Dichlorodifluoromethane, 2,2-Dichloropropane are outside control limits. Blank Spike meets program technical requirements.
- M87885-3MSD for Acetone, Dichlorodifluoromethane: Outside control limits. Blank Spike meets program technical requirements.

Extractables by GC By Method CT-ETPH 7/06

Matrix AQ	Batch ID: OP20176
------------------	--------------------------

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) M87697-20MS, M87697-20MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Extractables by GC By Method SW846 8082

Matrix AQ

Batch ID: OP20169

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M87697-18MS, M87697-18MSD were used as the QC samples indicated.

Metals By Method SW846 6010B

Matrix AQ

Batch ID: MP14558

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M87885-2DUP, M87885-2MS, M87885-2SDL, M87885-2DUP were used as the QC samples for metals.
- RPD(s) for Duplicate for Lead, Nickel are outside control limits for sample MP14558-D1. RPD acceptable due to low duplicate and sample concentrations.
- RPD(s) for Serial Dilution for Barium, Nickel, Zinc are outside control limits for sample MP14558-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- Only selected metals requested.

Metals By Method SW846 7470A

Matrix AQ

Batch ID: MP14563

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M87880-4DUP, M87880-4MS were used as the QC samples for metals.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety. The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(M87885).



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	1136034	Date Sampled:	12/07/09
Lab Sample ID:	M87885-1	Date Received:	12/07/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC: F&H Post Remediation GW Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P42953.D	1	12/16/09	AMY	n/a	n/a	MSP1418
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1136034	Date Sampled:	12/07/09
Lab Sample ID:	M87885-1	Date Received:	12/07/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC: F&H Post Remediation GW Monitoring		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	36.2	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	113%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1136034		
Lab Sample ID:	M87885-1	Date Sampled:	12/07/09
Matrix:	AQ - Ground Water	Date Received:	12/07/09
Method:	SW846 8260B	Percent Solids:	n/a
Project:	UTC: F&H Post Remediation GW Monitoring		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	109%		70-130%
460-00-4	4-Bromofluorobenzene	114%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1136034**Lab Sample ID:** M87885-1**Date Sampled:** 12/07/09**Matrix:** AQ - Ground Water**Date Received:** 12/07/09**Method:** CT-ETPH 7/06 SW846 3510C**Percent Solids:** n/a**Project:** UTC: F&H Post Remediation GW Monitoring

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BC35690.D	1	12/19/09	KD	12/11/09	OP20176	GBC1822
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
---------	----------	--------	----	-------	---

	CT-DRO (C9-C36)	ND	0.089	mg/l	
--	-----------------	----	-------	------	--

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
---------	----------------------	--------	--------	--------

3386-33-2	1-Chlorooctadecane	100%		50-149%
-----------	--------------------	------	--	---------

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1136034		
Lab Sample ID:	M87885-1	Date Sampled:	12/07/09
Matrix:	AQ - Ground Water	Date Received:	12/07/09
Method:	SW846 8082 SW846 3510C	Percent Solids:	n/a
Project:	UTC: F&H Post Remediation GW Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF72140.D	1	12/14/09	SL	12/10/09	OP20169	GEF3307
Run #2							

	Initial Volume	Final Volume
Run #1	800 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.31	ug/l	
11104-28-2	Aroclor 1221	ND	0.31	ug/l	
11141-16-5	Aroclor 1232	ND	0.31	ug/l	
53469-21-9	Aroclor 1242	ND	0.31	ug/l	
12672-29-6	Aroclor 1248	ND	0.31	ug/l	
11097-69-1	Aroclor 1254	ND	0.31	ug/l	
11096-82-5	Aroclor 1260	ND	0.31	ug/l	
37324-23-5	Aroclor 1262	ND	0.31	ug/l	
11100-14-4	Aroclor 1268	ND	0.31	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	62%		30-150%
877-09-8	Tetrachloro-m-xylene	63%		30-150%
2051-24-3	Decachlorobiphenyl	63%		30-150%
2051-24-3	Decachlorobiphenyl	66%		30-150%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1136034UF

Lab Sample ID: M87885-2

Date Sampled: 12/07/09

Matrix: AQ - Ground Water

Date Received: 12/07/09

Percent Solids: n/a

Project: UTC: F&H Post Remediation GW Monitoring

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Barium	< 200	200	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Cadmium	< 4.0	4.0	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Chromium	< 10	10	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Copper	< 25	25	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Lead	< 5.0	5.0	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	12/10/09	12/10/09 MA	SW846 7470A ¹	SW846 7470A ⁴
Nickel	< 40	40	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Selenium	< 10	10	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Silver	< 5.0	5.0	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Zinc	< 20	20	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³

(1) Instrument QC Batch: MA11275

(2) Instrument QC Batch: MA11288

(3) Prep QC Batch: MP14558

(4) Prep QC Batch: MP14563

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1136035		
Lab Sample ID:	M87885-3	Date Sampled:	12/07/09
Matrix:	AQ - Ground Water	Date Received:	12/07/09
Method:	SW846 8260B	Percent Solids:	n/a
Project:	UTC: F&H Post Remediation GW Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P42954.D	1	12/16/09	AMY	n/a	n/a	MSP1418
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1136035	Date Sampled:	12/07/09
Lab Sample ID:	M87885-3	Date Received:	12/07/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC: F&H Post Remediation GW Monitoring		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	122%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1136035		
Lab Sample ID:	M87885-3	Date Sampled:	12/07/09
Matrix:	AQ - Ground Water	Date Received:	12/07/09
Method:	SW846 8260B	Percent Solids:	n/a
Project:	UTC: F&H Post Remediation GW Monitoring		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	109%		70-130%
460-00-4	4-Bromofluorobenzene	116%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1136035	Date Sampled:	12/07/09
Lab Sample ID:	M87885-3	Date Received:	12/07/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	CT-ETPH 7/06 SW846 3510C		
Project:	UTC: F&H Post Remediation GW Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BC35692.D	1	12/19/09	KD	12/11/09	OP20176	GBC1822
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	ND	0.089	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	99%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1136035

Lab Sample ID: M87885-3

Date Sampled: 12/07/09

Matrix: AQ - Ground Water

Date Received: 12/07/09

Method: SW846 8082 SW846 3510C

Percent Solids: n/a

Project: UTC: F&H Post Remediation GW Monitoring

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF72141.D	1	12/14/09	SL	12/10/09	OP20169	GEF3307
Run #2							

	Initial Volume	Final Volume
Run #1	750 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.33	ug/l	
11104-28-2	Aroclor 1221	ND	0.33	ug/l	
11141-16-5	Aroclor 1232	ND	0.33	ug/l	
53469-21-9	Aroclor 1242	ND	0.33	ug/l	
12672-29-6	Aroclor 1248	ND	0.33	ug/l	
11097-69-1	Aroclor 1254	ND	0.33	ug/l	
11096-82-5	Aroclor 1260	ND	0.33	ug/l	
37324-23-5	Aroclor 1262	ND	0.33	ug/l	
11100-14-4	Aroclor 1268	ND	0.33	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	32%		30-150%
877-09-8	Tetrachloro-m-xylene	32%		30-150%
2051-24-3	Decachlorobiphenyl	61%		30-150%
2051-24-3	Decachlorobiphenyl	63%		30-150%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1136035UF

Lab Sample ID: M87885-4

Date Sampled: 12/07/09

Matrix: AQ - Ground Water

Date Received: 12/07/09

Percent Solids: n/a

Project: UTC: F&H Post Remediation GW Monitoring

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Barium	< 200	200	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Cadmium	< 4.0	4.0	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Chromium	37.7	10	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Copper	< 25	25	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Lead	< 5.0	5.0	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	12/10/09	12/10/09 MA	SW846 7470A ¹	SW846 7470A ⁴
Nickel	< 40	40	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Selenium	< 10	10	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Silver	< 5.0	5.0	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Zinc	< 20	20	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³

(1) Instrument QC Batch: MA11275

(2) Instrument QC Batch: MA11288

(3) Prep QC Batch: MP14558

(4) Prep QC Batch: MP14563

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1136036	Date Sampled:	12/07/09
Lab Sample ID:	M87885-5	Date Received:	12/07/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC: F&H Post Remediation GW Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P42955.D	1	12/16/09	AMY	n/a	n/a	MSP1418
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1136036	Date Sampled:	12/07/09
Lab Sample ID:	M87885-5	Date Received:	12/07/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC: F&H Post Remediation GW Monitoring		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	2.6	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	2.7	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	120%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1136036		
Lab Sample ID:	M87885-5	Date Sampled:	12/07/09
Matrix:	AQ - Ground Water	Date Received:	12/07/09
Method:	SW846 8260B	Percent Solids:	n/a
Project:	UTC: F&H Post Remediation GW Monitoring		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	108%		70-130%
460-00-4	4-Bromofluorobenzene	113%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1136036**Lab Sample ID:** M87885-5**Date Sampled:** 12/07/09**Matrix:** AQ - Ground Water**Date Received:** 12/07/09**Method:** CT-ETPH 7/06 SW846 3510C**Percent Solids:** n/a**Project:** UTC: F&H Post Remediation GW Monitoring

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BC35693.D	1	12/19/09	KD	12/11/09	OP20176	GBC1822
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
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	CT-DRO (C9-C36)	0.155	0.089	mg/l	
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CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
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3386-33-2	1-Chlorooctadecane	105%		50-149%
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ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1136036

Lab Sample ID: M87885-5

Date Sampled: 12/07/09

Matrix: AQ - Ground Water

Date Received: 12/07/09

Method: SW846 8082 SW846 3510C

Percent Solids: n/a

Project: UTC: F&H Post Remediation GW Monitoring

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF72142.D	1	12/14/09	SL	12/10/09	OP20169	GEF3307
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	65%		30-150%
877-09-8	Tetrachloro-m-xylene	63%		30-150%
2051-24-3	Decachlorobiphenyl	72%		30-150%
2051-24-3	Decachlorobiphenyl	74%		30-150%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1136036UF**Lab Sample ID:** M87885-6**Date Sampled:** 12/07/09**Matrix:** AQ - Ground Water**Date Received:** 12/07/09**Percent Solids:** n/a**Project:** UTC: F&H Post Remediation GW Monitoring**Total Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Barium	< 200	200	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Cadmium	< 4.0	4.0	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Chromium	< 10	10	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Copper	< 25	25	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Lead	< 5.0	5.0	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	12/10/09	12/10/09 MA	SW846 7470A ¹	SW846 7470A ⁴
Nickel	< 40	40	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Selenium	< 10	10	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Silver	< 5.0	5.0	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Zinc	< 20	20	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³

(1) Instrument QC Batch: MA11275

(2) Instrument QC Batch: MA11288

(3) Prep QC Batch: MP14558

(4) Prep QC Batch: MP14563

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1136037	Date Sampled:	12/07/09
Lab Sample ID:	M87885-7	Date Received:	12/07/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC: F&H Post Remediation GW Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P42956.D	1	12/16/09	AMY	n/a	n/a	MSP1418
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1136037	Date Sampled:	12/07/09
Lab Sample ID:	M87885-7	Date Received:	12/07/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC: F&H Post Remediation GW Monitoring		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	122%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1136037		
Lab Sample ID:	M87885-7	Date Sampled:	12/07/09
Matrix:	AQ - Ground Water	Date Received:	12/07/09
Method:	SW846 8260B	Percent Solids:	n/a
Project:	UTC: F&H Post Remediation GW Monitoring		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	108%		70-130%
460-00-4	4-Bromofluorobenzene	115%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1136037	Date Sampled:	12/07/09
Lab Sample ID:	M87885-7	Date Received:	12/07/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	CT-ETPH 7/06 SW846 3510C		
Project:	UTC: F&H Post Remediation GW Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BC35694.D	1	12/19/09	KD	12/11/09	OP20176	GBC1822
Run #2							

	Initial Volume	Final Volume
Run #1	980 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	ND	0.082	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	116%		50-149%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1136037

Lab Sample ID: M87885-7

Date Sampled: 12/07/09

Matrix: AQ - Ground Water

Date Received: 12/07/09

Method: SW846 8082 SW846 3510C

Percent Solids: n/a

Project: UTC: F&H Post Remediation GW Monitoring

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF72143.D	1	12/14/09	SL	12/10/09	OP20169	GEF3307
Run #2							

	Initial Volume	Final Volume
Run #1	750 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.33	ug/l	
11104-28-2	Aroclor 1221	ND	0.33	ug/l	
11141-16-5	Aroclor 1232	ND	0.33	ug/l	
53469-21-9	Aroclor 1242	ND	0.33	ug/l	
12672-29-6	Aroclor 1248	ND	0.33	ug/l	
11097-69-1	Aroclor 1254	ND	0.33	ug/l	
11096-82-5	Aroclor 1260	ND	0.33	ug/l	
37324-23-5	Aroclor 1262	ND	0.33	ug/l	
11100-14-4	Aroclor 1268	ND	0.33	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	73%		30-150%
877-09-8	Tetrachloro-m-xylene	74%		30-150%
2051-24-3	Decachlorobiphenyl	59%		30-150%
2051-24-3	Decachlorobiphenyl	62%		30-150%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1136037UF

Lab Sample ID: M87885-8

Date Sampled: 12/07/09

Matrix: AQ - Ground Water

Date Received: 12/07/09

Percent Solids: n/a

Project: UTC: F&H Post Remediation GW Monitoring

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Barium	< 200	200	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Cadmium	< 4.0	4.0	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Chromium	< 10	10	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Copper	< 25	25	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Lead	< 5.0	5.0	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	12/10/09	12/10/09 MA	SW846 7470A ¹	SW846 7470A ⁴
Nickel	< 40	40	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Selenium	< 10	10	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Silver	< 5.0	5.0	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Zinc	< 20	20	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³

(1) Instrument QC Batch: MA11275

(2) Instrument QC Batch: MA11288

(3) Prep QC Batch: MP14558

(4) Prep QC Batch: MP14563

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1136038		
Lab Sample ID:	M87885-9	Date Sampled:	12/07/09
Matrix:	AQ - Ground Water	Date Received:	12/07/09
Method:	SW846 8260B	Percent Solids:	n/a
Project:	UTC: F&H Post Remediation GW Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P42957.D	1	12/16/09	AMY	n/a	n/a	MSP1418
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1136038	Date Sampled:	12/07/09
Lab Sample ID:	M87885-9	Date Received:	12/07/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC: F&H Post Remediation GW Monitoring		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	125%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1136038		
Lab Sample ID:	M87885-9	Date Sampled:	12/07/09
Matrix:	AQ - Ground Water	Date Received:	12/07/09
Method:	SW846 8260B	Percent Solids:	n/a
Project:	UTC: F&H Post Remediation GW Monitoring		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	110%		70-130%
460-00-4	4-Bromofluorobenzene	113%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1136030	Date Sampled:	12/07/09
Lab Sample ID:	M87885-10	Date Received:	12/07/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC: F&H Post Remediation GW Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P42958.D	1	12/16/09	AMY	n/a	n/a	MSP1418
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	2.6	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	2.3	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1136030	Date Sampled:	12/07/09
Lab Sample ID:	M87885-10	Date Received:	12/07/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC: F&H Post Remediation GW Monitoring		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	18.8	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	6.1	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	1.8	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	122%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1136030		
Lab Sample ID:	M87885-10	Date Sampled:	12/07/09
Matrix:	AQ - Ground Water	Date Received:	12/07/09
Method:	SW846 8260B	Percent Solids:	n/a
Project:	UTC: F&H Post Remediation GW Monitoring		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	112%		70-130%
460-00-4	4-Bromofluorobenzene	113%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1136030	Date Sampled:	12/07/09
Lab Sample ID:	M87885-10	Date Received:	12/07/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	CT-ETPH 7/06 SW846 3510C		
Project:	UTC: F&H Post Remediation GW Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BC35695.D	1	12/19/09	KD	12/11/09	OP20176	GBC1822
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	0.431	0.080	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	105%		50-149%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1136030		
Lab Sample ID:	M87885-10	Date Sampled:	12/07/09
Matrix:	AQ - Ground Water	Date Received:	12/07/09
Method:	SW846 8082 SW846 3510C	Percent Solids:	n/a
Project:	UTC: F&H Post Remediation GW Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF72144.D	1	12/14/09	SL	12/10/09	OP20169	GEF3307
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.26	ug/l	
11104-28-2	Aroclor 1221	ND	0.26	ug/l	
11141-16-5	Aroclor 1232	ND	0.26	ug/l	
53469-21-9	Aroclor 1242	ND	0.26	ug/l	
12672-29-6	Aroclor 1248	ND	0.26	ug/l	
11097-69-1	Aroclor 1254	ND	0.26	ug/l	
11096-82-5	Aroclor 1260	ND	0.26	ug/l	
37324-23-5	Aroclor 1262	ND	0.26	ug/l	
11100-14-4	Aroclor 1268	ND	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	58%		30-150%
877-09-8	Tetrachloro-m-xylene	62%		30-150%
2051-24-3	Decachlorobiphenyl	69%		30-150%
2051-24-3	Decachlorobiphenyl	72%		30-150%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1136030UF**Lab Sample ID:** M87885-11**Date Sampled:** 12/07/09**Matrix:** AQ - Ground Water**Date Received:** 12/07/09**Percent Solids:** n/a**Project:** UTC: F&H Post Remediation GW Monitoring**Total Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Barium	< 200	200	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Cadmium	< 4.0	4.0	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Chromium	< 10	10	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Copper	< 25	25	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Lead	< 5.0	5.0	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	12/10/09	12/10/09 MA	SW846 7470A ¹	SW846 7470A ⁴
Nickel	< 40	40	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Selenium	< 10	10	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Silver	< 5.0	5.0	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Zinc	< 20	20	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³

(1) Instrument QC Batch: MA11275

(2) Instrument QC Batch: MA11288

(3) Prep QC Batch: MP14558

(4) Prep QC Batch: MP14563

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1136033	Date Sampled:	12/07/09
Lab Sample ID:	M87885-12	Date Received:	12/07/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC: F&H Post Remediation GW Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P42959.D	1	12/16/09	AMY	n/a	n/a	MSP1418
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	2.8	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	2.3	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1136033	Date Sampled:	12/07/09
Lab Sample ID:	M87885-12	Date Received:	12/07/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC: F&H Post Remediation GW Monitoring		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	19.6	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	6.1	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	1.8	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	126%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1136033		
Lab Sample ID:	M87885-12	Date Sampled:	12/07/09
Matrix:	AQ - Ground Water	Date Received:	12/07/09
Method:	SW846 8260B	Percent Solids:	n/a
Project:	UTC: F&H Post Remediation GW Monitoring		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	113%		70-130%
460-00-4	4-Bromofluorobenzene	111%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1136033**Lab Sample ID:** M87885-12**Date Sampled:** 12/07/09**Matrix:** AQ - Ground Water**Date Received:** 12/07/09**Method:** CT-ETPH 7/06 SW846 3510C**Percent Solids:** n/a**Project:** UTC: F&H Post Remediation GW Monitoring

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BC35696.D	1	12/19/09	KD	12/11/09	OP20176	GBC1822
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	0.392	0.080	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
3386-33-2	1-Chlorooctadecane	95%		50-149%	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1136033	Date Sampled:	12/07/09
Lab Sample ID:	M87885-12	Date Received:	12/07/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8082 SW846 3510C		
Project:	UTC: F&H Post Remediation GW Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF72145.D	1	12/14/09	SL	12/10/09	OP20169	GEF3307
Run #2							

	Initial Volume	Final Volume
Run #1	980 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.26	ug/l	
11104-28-2	Aroclor 1221	ND	0.26	ug/l	
11141-16-5	Aroclor 1232	ND	0.26	ug/l	
53469-21-9	Aroclor 1242	ND	0.26	ug/l	
12672-29-6	Aroclor 1248	ND	0.26	ug/l	
11097-69-1	Aroclor 1254	ND	0.26	ug/l	
11096-82-5	Aroclor 1260	ND	0.26	ug/l	
37324-23-5	Aroclor 1262	ND	0.26	ug/l	
11100-14-4	Aroclor 1268	ND	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	55%		30-150%
877-09-8	Tetrachloro-m-xylene	55%		30-150%
2051-24-3	Decachlorobiphenyl	58%		30-150%
2051-24-3	Decachlorobiphenyl	61%		30-150%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1136033UF	Date Sampled:	12/07/09
Lab Sample ID:	M87885-13	Date Received:	12/07/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	UTC: F&H Post Remediation GW Monitoring		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Barium	< 200	200	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Cadmium	< 4.0	4.0	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Chromium	< 10	10	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Copper	< 25	25	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Lead	< 5.0	5.0	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	12/10/09	12/10/09 MA	SW846 7470A ¹	SW846 7470A ⁴
Nickel	< 40	40	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Selenium	< 10	10	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Silver	< 5.0	5.0	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Zinc	< 20	20	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³

(1) Instrument QC Batch: MA11275

(2) Instrument QC Batch: MA11288

(3) Prep QC Batch: MP14558

(4) Prep QC Batch: MP14563

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1136031		
Lab Sample ID:	M87885-14	Date Sampled:	12/07/09
Matrix:	AQ - Ground Water	Date Received:	12/07/09
Method:	SW846 8260B	Percent Solids:	n/a
Project:	UTC: F&H Post Remediation GW Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P42960.D	1	12/16/09	AMY	n/a	n/a	MSP1418
Run #2 ^a	P42939.D	1	12/16/09	AMY	n/a	n/a	MSP1417

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1136031	Date Sampled:	12/07/09
Lab Sample ID:	M87885-14	Date Received:	12/07/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC: F&H Post Remediation GW Monitoring		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	128%	125%	70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1136031		
Lab Sample ID:	M87885-14	Date Sampled:	12/07/09
Matrix:	AQ - Ground Water	Date Received:	12/07/09
Method:	SW846 8260B	Percent Solids:	n/a
Project:	UTC: F&H Post Remediation GW Monitoring		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	109%	110%	70-130%
460-00-4	4-Bromofluorobenzene	116%	111%	70-130%

(a) Confirmation run for internal standard areas.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1136031**Lab Sample ID:** M87885-14**Date Sampled:** 12/07/09**Matrix:** AQ - Ground Water**Date Received:** 12/07/09**Method:** CT-ETPH 7/06 SW846 3510C**Percent Solids:** n/a**Project:** UTC: F&H Post Remediation GW Monitoring

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BC35697.D	1	12/19/09	KD	12/11/09	OP20176	GBC1822
Run #2							

	Initial Volume	Final Volume
Run #1	990 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
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	CT-DRO (C9-C36)	0.0939	0.081	mg/l	
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CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
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3386-33-2	1-Chlorooctadecane	104%		50-149%
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ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1136031**Lab Sample ID:** M87885-14**Date Sampled:** 12/07/09**Matrix:** AQ - Ground Water**Date Received:** 12/07/09**Method:** SW846 8082 SW846 3510C**Percent Solids:** n/a**Project:** UTC: F&H Post Remediation GW Monitoring

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF72146.D	1	12/14/09	SL	12/10/09	OP20169	GEF3307
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.26	ug/l	
11104-28-2	Aroclor 1221	ND	0.26	ug/l	
11141-16-5	Aroclor 1232	ND	0.26	ug/l	
53469-21-9	Aroclor 1242	ND	0.26	ug/l	
12672-29-6	Aroclor 1248	ND	0.26	ug/l	
11097-69-1	Aroclor 1254	ND	0.26	ug/l	
11096-82-5	Aroclor 1260	ND	0.26	ug/l	
37324-23-5	Aroclor 1262	ND	0.26	ug/l	
11100-14-4	Aroclor 1268	ND	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	69%		30-150%
877-09-8	Tetrachloro-m-xylene	72%		30-150%
2051-24-3	Decachlorobiphenyl	66%		30-150%
2051-24-3	Decachlorobiphenyl	69%		30-150%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1136031UF**Lab Sample ID:** M87885-15**Date Sampled:** 12/07/09**Matrix:** AQ - Ground Water**Date Received:** 12/07/09**Percent Solids:** n/a**Project:** UTC: F&H Post Remediation GW Monitoring**Total Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Barium	< 200	200	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Cadmium	< 4.0	4.0	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Chromium	< 10	10	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Copper	< 25	25	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Lead	< 5.0	5.0	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	12/10/09	12/10/09 MA	SW846 7470A ¹	SW846 7470A ⁴
Nickel	< 40	40	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Selenium	< 10	10	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Silver	< 5.0	5.0	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Zinc	< 20	20	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³

(1) Instrument QC Batch: MA11275

(2) Instrument QC Batch: MA11288

(3) Prep QC Batch: MP14558

(4) Prep QC Batch: MP14563

RL = Reporting Limit

Report of Analysis

Client Sample ID:	1136032		
Lab Sample ID:	M87885-16	Date Sampled:	12/07/09
Matrix:	AQ - Ground Water	Date Received:	12/07/09
Method:	SW846 8260B	Percent Solids:	n/a
Project:	UTC: F&H Post Remediation GW Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P42961.D	1	12/16/09	AMY	n/a	n/a	MSP1418
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1136032	Date Sampled:	12/07/09
Lab Sample ID:	M87885-16	Date Received:	12/07/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	UTC: F&H Post Remediation GW Monitoring		

VOA RCP List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	1.3	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	128%		70-130%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1136032		
Lab Sample ID:	M87885-16	Date Sampled:	12/07/09
Matrix:	AQ - Ground Water	Date Received:	12/07/09
Method:	SW846 8260B	Percent Solids:	n/a
Project:	UTC: F&H Post Remediation GW Monitoring		

VOA RCP List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	112%		70-130%
460-00-4	4-Bromofluorobenzene	114%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 1136032**Lab Sample ID:** M87885-16**Date Sampled:** 12/07/09**Matrix:** AQ - Ground Water**Date Received:** 12/07/09**Method:** CT-ETPH 7/06 SW846 3510C**Percent Solids:** n/a**Project:** UTC: F&H Post Remediation GW Monitoring

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BC35698.D	1	12/19/09	KD	12/11/09	OP20176	GBC1822
Run #2							

	Initial Volume	Final Volume
Run #1	990 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	0.568	0.081	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	103%		50-149%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1136032		
Lab Sample ID:	M87885-16	Date Sampled:	12/07/09
Matrix:	AQ - Ground Water	Date Received:	12/07/09
Method:	SW846 8082 SW846 3510C	Percent Solids:	n/a
Project:	UTC: F&H Post Remediation GW Monitoring		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF72147.D	1	12/14/09	SL	12/10/09	OP20169	GEF3307
Run #2							

	Initial Volume	Final Volume
Run #1	980 ml	5.0 ml
Run #2		

CT Polychlorinated Biphenyls RCP List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.26	ug/l	
11104-28-2	Aroclor 1221	ND	0.26	ug/l	
11141-16-5	Aroclor 1232	ND	0.26	ug/l	
53469-21-9	Aroclor 1242	ND	0.26	ug/l	
12672-29-6	Aroclor 1248	ND	0.26	ug/l	
11097-69-1	Aroclor 1254	ND	0.26	ug/l	
11096-82-5	Aroclor 1260	ND	0.26	ug/l	
37324-23-5	Aroclor 1262	ND	0.26	ug/l	
11100-14-4	Aroclor 1268	ND	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	72%		30-150%
877-09-8	Tetrachloro-m-xylene	72%		30-150%
2051-24-3	Decachlorobiphenyl	83%		30-150%
2051-24-3	Decachlorobiphenyl	90%		30-150%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	1136032UF	Date Sampled:	12/07/09
Lab Sample ID:	M87885-17	Date Received:	12/07/09
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	UTC: F&H Post Remediation GW Monitoring		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Barium	< 200	200	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Cadmium	< 4.0	4.0	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Chromium	< 10	10	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Copper	< 25	25	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Lead	< 5.0	5.0	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	12/10/09	12/10/09 MA	SW846 7470A ¹	SW846 7470A ⁴
Nickel	< 40	40	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Selenium	< 10	10	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Silver	< 5.0	5.0	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³
Zinc	< 20	20	ug/l	1	12/09/09	12/14/09 PY	SW846 6010B ²	SW846 3010A ³

(1) Instrument QC Batch: MA11275

(2) Instrument QC Batch: MA11288

(3) Prep QC Batch: MP14558

(4) Prep QC Batch: MP14563

RL = Reporting Limit



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Certification Exceptions (CT)
- Chain of Custody
- RCP Form
- Sample Tracking Chronicle

Parameter Certification Exceptions

Job Number: M87885
Account: LEA Loureiro Eng. Associates
Project: UTC: F&H Post Remediation GW Monitoring

The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
Aroclor 1262	37324-23-5	SW846 8082	AQ	Certified by SOP MGC204/GC-ECD
Aroclor 1268	11100-14-4	SW846 8082	AQ	Certified by SOP MGC204/GC-ECD

4.1
4



495 TECHNOLOGY CENTER WEST • BUILDING ONE
MARLBOROUGH, MA 01752
TEL: 508-481-6200 • FAX: 508-481-7753

M87885

ACCUTEST QUOTE #:

4.2

Page 1 of 3

2/2

CHAIN OF CUSTODY

495 TECHNOLOGY CENTER WEST • BUILDING ONE
MARLBOROUGH, MA 01752
TEL: 508-481-6200 • FAX: 508-481-7753

ACCUTEST JOB #:

M87885

ACCUTEST QUOTE #:

CLIENT INFORMATION		FACILITY INFORMATION		ANALYTICAL INFORMATION												MATRIX CODES	
NAME LEA ADDRESS 100 Northwest Dr CITY, STATE ZIP Plainville CT 06062 SEND REPORT TO: PHONE # (860) 747-6681		PROJECT NAME F+H Post Remediation GW monitoring LOCATION East Hartford PROJECT NO. 88UT908 FAX #		VOCs CT/ETPH PCBs Metals Pb, Cd, Cr, Ni, Zn												DW - DRINKING WATER GW - GROUND WATER WW - WASTE WATER SO - SOIL SL - SLUDGE OI - OIL LQ - OTHER LIQUID SOL - OTHER SOLID	
ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION			MATRIX	# OF BOTTLES	PRESERVATION										LAB USE ONLY
		DATE	TIME	SAMPLED BY:			HCl	NO ₂ H	NO ₃ H	HNO ₃	H ₂ O ₂	NONE	ICE				
-10	1136030	12/17/09	9:50	RJZ	GW	3	X							X	X		
	1136030		9:50			4								X	X		
-11	1136030 up		9:50			1			X					X			
72	1136033		9:50			3	X							X	X		
	1136033		9:50			4								X	X		
-B	1136033 up		9:50			1			X					X			
74	1136031		12:10			2	X							X	X		
	1136031		12:10			4								X	X		
-15	1136031 up		12:10			1			X					X			
-16	1136032		13:50			2	X							X	X		
	1136032		13:50			4								X	X		
-17	1136032 up		13:50			1			X					X			
DATA TURNAROUND INFORMATION		DATA DELIVERABLE INFORMATION		COMMENTS/REMARKS													
<input checked="" type="checkbox"/> 14 DAYS STANDARD <input type="checkbox"/> 7 DAYS RUSH <input type="checkbox"/> 48 HOUR EMERGENCY <input type="checkbox"/> OTHER		APPROVED BY: <input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> COMMERCIAL "B" <input type="checkbox"/> DISK DELIVERABLE <input type="checkbox"/> STATE FORMS <input type="checkbox"/> OTHER (SPECIFY)															
14 DAY TURNAROUND HARDCOPY, EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED																	
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY																	
RELINQUISHED BY SAMPLER:		DATE TIME:		RECEIVED BY:		DATE TIME:		RELINQUISHED BY:		DATE TIME:		RECEIVED BY:		DATE TIME:		RECEIVED BY:	
1. N. MacKenzie		12/17/09 15:15		1. B. [Signature]				2. [Signature]				2. [Signature]				2. [Signature]	
3. [Signature]				3. [Signature]				4. [Signature]				4. [Signature]				4. [Signature]	
5. [Signature]				5. [Signature]				SEAL #		PRESERVE WHERE APPLICABLE		ON ICE		TEMPERATURE		C	

4.2
4

M87885: Chain of Custody

Page 2 of 3



Accutest Laboratories Sample Receipt Summary

Accutest Job Number: M87885

Client: LEA

Immediate Client Services Action Required: No

Date / Time Received: 12/7/2009 5:45:00 PM

No. Coolers: 1

Client Service Action Required at Login: No

Project: EAST HARTFORD

Airbill #'s: N/A

Cooler Security

Y or N

Y or N

- | | | | | | |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. COC Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Cooler Temperature

Y or N

- | | | |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Cooler temp verification: | Infrared gun | |
| 3. Cooler media: | Ice (bag) | |

Quality Control Preservation

Y or N

N/A

- | | | |
|---------------------------------|-------------------------------------|--------------------------|
| 1. Trip Blank present / cooler: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Trip Blank listed on COC: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Samples preserved properly: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 4. VOCs headspace free: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Sample Integrity - Documentation

Y or N

- | | | |
|--|-------------------------------------|--------------------------|
| 1. Sample labels present on bottles: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Container labeling complete: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Sample Integrity - Condition

Y or N

- | | | |
|----------------------------------|-------------------------------------|--------------------------|
| 1. Sample recvd within HT: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Condition of sample: | Intact | |

Sample Integrity - Instructions

Y or N N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 3. Sufficient volume rec'd for analysis: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. Compositing instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Comments

Accutest Laboratories
V:508.481.6200

495 Technology Center West, Bldg One
F: 508.481.7753

Marlborough, MA
www.accutest.com

M87885: Chain of Custody

Page 3 of 3

Reasonable Confidence Protocol Laboratory Analysis QA/QC Certification Form

Laboratory Name: Accutest New England Client: Loureiro Eng. Associates

Project Location: UTC: F&H Post Remediation GW Monitoring Project Number: 88UT908

Sampling Date(s): 12/7/2009

Laboratory Sample ID(s): M87885-1, M87885-2, M87885-3, M87885-4, M87885-5, M87885-6, M87885-7, M87885-8, M87885-9, M87885-10, M87885-11, M87885-12, M87885-13, M87885-14, M87885-15, M87885-16, M87885-17

Methods: CT-ETPH 7/06, SW846 6010B, SW846 7470A, 8082, 8260B

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CTDEP method-specific Reasonable Confidence Protocol documents)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1A	Where all the method specified preservation and holding time requirements met?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1B	VPH and EPH methods only: Was the VPH or EPH method conducted without significant modifications (See section 11.3 of respective methods)	Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input checked="" type="checkbox"/>
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
3	Were samples received at an appropriate temperature (<6° C)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
4	Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
5	a) Were reporting limits specified or referenced on the chain-of-custody?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
	b) Were these reporting limits met?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Note: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence".

I, the undersigned, attest under pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized

Signature:

Position: Lab Director

Printed Name: Reza Tand
Accutest New England

Date: 12/21/2009

Internal Sample Tracking Chronicle

Loureiro Eng. Associates

Job No: M87885

UTC: F&H Post Remediation GW Monitoring
Project No: 88UT908

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M87885-1 1136034	Collected: 07-DEC-09 10:35	By: NE	Received: 07-DEC-09	By: JB		
M87885-1	SW846 8082	14-DEC-09 02:35	SL	10-DEC-09	DG	P8082RCP
M87885-1	SW846 8260B	16-DEC-09 14:02	AMY			V8260RCP
M87885-1	CT-ETPH 7/06	19-DEC-09 02:30	KD	11-DEC-09	DG	BCTTPH
M87885-2 1136034UF	Collected: 07-DEC-09 10:35	By: NE	Received: 07-DEC-09	By: JB		
M87885-2	SW846 7470A	10-DEC-09 15:08	MA	10-DEC-09	MA	HG
M87885-2	SW846 6010B	14-DEC-09 15:36	PY	09-DEC-09	EAL	AG,AS,BA,CD,CR,CU,NI,PB,SE, ZN
M87885-3 1136035	Collected: 07-DEC-09 13:05	By: NE	Received: 07-DEC-09	By: JB		
M87885-3	SW846 8082	14-DEC-09 03:04	SL	10-DEC-09	DG	P8082RCP
M87885-3	SW846 8260B	16-DEC-09 14:29	AMY			V8260RCP
M87885-3	CT-ETPH 7/06	19-DEC-09 03:09	KD	11-DEC-09	DG	BCTTPH
M87885-4 1136035UF	Collected: 07-DEC-09 13:05	By: NE	Received: 07-DEC-09	By: JB		
M87885-4	SW846 7470A	10-DEC-09 15:11	MA	10-DEC-09	MA	HG
M87885-4	SW846 6010B	14-DEC-09 16:56	PY	09-DEC-09	EAL	AG,AS,BA,CD,CR,CU,NI,PB,SE, ZN
M87885-5 1136036	Collected: 07-DEC-09 00:00	By: NE	Received: 07-DEC-09	By: JB		
M87885-5	SW846 8082	14-DEC-09 03:49	SL	10-DEC-09	DG	P8082RCP
M87885-5	SW846 8260B	16-DEC-09 14:56	AMY			V8260RCP
M87885-5	CT-ETPH 7/06	19-DEC-09 03:48	KD	11-DEC-09	DG	BCTTPH
M87885-6 1136036UF	Collected: 07-DEC-09 00:00	By: NE	Received: 07-DEC-09	By: JB		
M87885-6	SW846 7470A	10-DEC-09 15:13	MA	10-DEC-09	MA	HG

Internal Sample Tracking Chronicle

Loureiro Eng. Associates

Job No: M87885

UTC: F&H Post Remediation GW Monitoring
Project No: 88UT908

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M87885-6	SW846 6010B	14-DEC-09 17:01	PY	09-DEC-09	EAL	AG,AS,BA,CD,CR,CU,NI,PB,SE, ZN
M87885-7	Collected: 07-DEC-09 14:30	By: NE	Received: 07-DEC-09	By: JB		
1136037						
M87885-7	SW846 8082	14-DEC-09 04:18	SL	10-DEC-09	DG	P8082RCP
M87885-7	SW846 8260B	16-DEC-09 15:24	AMY			V8260RCP
M87885-7	CT-ETPH 7/06	19-DEC-09 04:27	KD	11-DEC-09	DG	BCTTPH
M87885-8	Collected: 07-DEC-09 14:30	By: NE	Received: 07-DEC-09	By: JB		
1136037UF						
M87885-8	SW846 7470A	10-DEC-09 15:15	MA	10-DEC-09	MA	HG
M87885-8	SW846 6010B	14-DEC-09 17:05	PY	09-DEC-09	EAL	AG,AS,BA,CD,CR,CU,NI,PB,SE, ZN
M87885-9	Collected: 07-DEC-09 09:45	By: NE	Received: 07-DEC-09	By: JB		
1136038						
M87885-9	SW846 8260B	16-DEC-09 15:51	AMY			V8260RCP
M87885-10	Collected: 07-DEC-09 09:50	By: NE	Received: 07-DEC-09	By: JB		
1136030						
M87885-10	SW846 8082	14-DEC-09 05:03	SL	10-DEC-09	DG	P8082RCP
M87885-10	SW846 8260B	16-DEC-09 16:18	AMY			V8260RCP
M87885-10	CT-ETPH 7/06	19-DEC-09 05:06	KD	11-DEC-09	DG	BCTTPH
M87885-11	Collected: 07-DEC-09 09:50	By: NE	Received: 07-DEC-09	By: JB		
1136030UF						
M87885-11	SW846 7470A	10-DEC-09 15:18	MA	10-DEC-09	MA	HG
M87885-11	SW846 6010B	14-DEC-09 17:09	PY	09-DEC-09	EAL	AG,AS,BA,CD,CR,CU,NI,PB,SE, ZN
M87885-12	Collected: 07-DEC-09 09:50	By: NE	Received: 07-DEC-09	By: JB		
1136033						
M87885-12	SW846 8082	14-DEC-09 05:32	SL	10-DEC-09	DG	P8082RCP

Internal Sample Tracking Chronicle

Loureiro Eng. Associates

Job No: M87885

UTC: F&H Post Remediation GW Monitoring
Project No: 88UT908

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
M87885-12	SW846 8260B	16-DEC-09 16:45	AMY			V8260RCP
M87885-12	CT-ETPH 7/06	19-DEC-09 05:45	KD	11-DEC-09	DG	BCTTPH
M87885-13 Collected: 07-DEC-09 09:50 By: NE Received: 07-DEC-09 By: JB 1136033UF						
M87885-13	SW846 7470A	10-DEC-09 15:25	MA	10-DEC-09	MA	HG
M87885-13	SW846 6010B	14-DEC-09 17:14	PY	09-DEC-09	EAL	AG,AS,BA,CD,CR,CU,NI,PB,SE, ZN
M87885-14 Collected: 07-DEC-09 09:50 By: NE Received: 07-DEC-09 By: JB 1136031						
M87885-14	SW846 8082	14-DEC-09 06:17	SL	10-DEC-09	DG	P8082RCP
M87885-14	SW846 8260B	16-DEC-09 07:01	AMY			V8260RCP
M87885-14	SW846 8260B	16-DEC-09 17:12	AMY			V8260RCP
M87885-14	CT-ETPH 7/06	19-DEC-09 06:24	KD	11-DEC-09	DG	BCTTPH
M87885-15 Collected: 07-DEC-09 12:10 By: NE Received: 07-DEC-09 By: JB 1136031UF						
M87885-15	SW846 7470A	10-DEC-09 15:27	MA	10-DEC-09	MA	HG
M87885-15	SW846 6010B	14-DEC-09 17:18	PY	09-DEC-09	EAL	AG,AS,BA,CD,CR,CU,NI,PB,SE, ZN
M87885-16 Collected: 07-DEC-09 13:50 By: NE Received: 07-DEC-09 By: JB 1136032						
M87885-16	SW846 8082	14-DEC-09 06:46	SL	10-DEC-09	DG	P8082RCP
M87885-16	SW846 8260B	16-DEC-09 17:40	AMY			V8260RCP
M87885-16	CT-ETPH 7/06	19-DEC-09 07:03	KD	11-DEC-09	DG	BCTTPH
M87885-17 Collected: 07-DEC-09 13:50 By: NE Received: 07-DEC-09 By: JB 1136032UF						
M87885-17	SW846 7470A	10-DEC-09 15:30	MA	10-DEC-09	MA	HG
M87885-17	SW846 6010B	14-DEC-09 17:31	PY	09-DEC-09	EAL	AG,AS,BA,CD,CR,CU,NI,PB,SE, ZN



GC/MS Volatiles

5

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Page 1 of 3

Job Number: M87885

Account: LEA Loureiro Eng. Associates

Project: UTC: F&H Post Remediation GW Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSP1418-MB	P42952.D	1	12/16/09	AMY	n/a	n/a	MSP1418

The QC reported here applies to the following samples:

Method: SW846 8260B

M87885-1, M87885-3, M87885-5, M87885-7, M87885-9, M87885-10, M87885-12, M87885-14, M87885-16

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
107-13-1	Acrylonitrile	ND	25	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	

Method Blank Summary

Page 2 of 3

Job Number: M87885

Account: LEA Loureiro Eng. Associates

Project: UTC: F&H Post Remediation GW Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSP1418-MB	P42952.D	1	12/16/09	AMY	n/a	n/a	MSP1418

The QC reported here applies to the following samples:

Method: SW846 8260B

M87885-1, M87885-3, M87885-5, M87885-7, M87885-9, M87885-10, M87885-12, M87885-14, M87885-16

CAS No.	Compound	Result	RL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
76-13-1	Freon 113	ND	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
109-99-9	Tetrahydrofuran	ND	10	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	

Method Blank Summary

Job Number: M87885
Account: LEA Loureiro Eng. Associates
Project: UTC: F&H Post Remediation GW Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSP1418-MB	P42952.D	1	12/16/09	AMY	n/a	n/a	MSP1418

The QC reported here applies to the following samples: Method: SW846 8260B

M87885-1, M87885-3, M87885-5, M87885-7, M87885-9, M87885-10, M87885-12, M87885-14, M87885-16

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	115% 70-130%
2037-26-5	Toluene-D8	108% 70-130%
460-00-4	4-Bromofluorobenzene	115% 70-130%

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 3

Job Number: M87885**Account:** LEA Loureiro Eng. Associates**Project:** UTC: F&H Post Remediation GW Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSP1418-BS	P42949.D	1	12/16/09	AMY	n/a	n/a	MSP1418
MSP1418-BSD	P42950.D	1	12/16/09	AMY	n/a	n/a	MSP1418

The QC reported here applies to the following samples:**Method:** SW846 8260B

M87885-1, M87885-3, M87885-5, M87885-7, M87885-9, M87885-10, M87885-12, M87885-14, M87885-16

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	50	63.9	128	41.4	83	43* a	70-130/25
107-13-1	Acrylonitrile	250	294	118	284	114	3	70-130/25
71-43-2	Benzene	50	53.7	107	54.4	109	1	70-130/25
108-86-1	Bromobenzene	50	50.2	100	51.1	102	2	70-130/25
75-27-4	Bromodichloromethane	50	50.9	102	50.3	101	1	70-130/25
75-25-2	Bromoform	50	44.0	88	44.1	88	0	70-130/25
74-83-9	Bromomethane	50	52.7	105	53.7	107	2	70-130/25
78-93-3	2-Butanone (MEK)	50	52.4	105	46.7	93	12	70-130/25
104-51-8	n-Butylbenzene	50	48.2	96	48.2	96	0	70-130/25
135-98-8	sec-Butylbenzene	50	51.4	103	52.4	105	2	70-130/25
98-06-6	tert-Butylbenzene	50	48.8	98	49.6	99	2	70-130/25
75-15-0	Carbon disulfide	50	50.7	101	50.8	102	0	70-130/25
56-23-5	Carbon tetrachloride	50	51.5	103	52.0	104	1	70-130/25
108-90-7	Chlorobenzene	50	47.1	94	48.5	97	3	70-130/25
75-00-3	Chloroethane	50	46.6	93	48.6	97	4	70-130/25
67-66-3	Chloroform	50	56.2	112	56.3	113	0	70-130/25
74-87-3	Chloromethane	50	45.4	91	40.2	80	12	70-130/25
95-49-8	o-Chlorotoluene	50	53.5	107	54.5	109	2	70-130/25
106-43-4	p-Chlorotoluene	50	52.5	105	53.8	108	2	70-130/25
96-12-8	1,2-Dibromo-3-chloropropane	50	48.1	96	48.0	96	0	70-130/25
124-48-1	Dibromochloromethane	50	49.2	98	49.8	100	1	70-130/25
106-93-4	1,2-Dibromoethane	50	48.0	96	49.9	100	4	70-130/25
95-50-1	1,2-Dichlorobenzene	50	48.9	98	48.9	98	0	70-130/25
541-73-1	1,3-Dichlorobenzene	50	49.9	100	50.1	100	0	70-130/25
106-46-7	1,4-Dichlorobenzene	50	48.1	96	48.0	96	0	70-130/25
75-71-8	Dichlorodifluoromethane	50	28.7	57* a	29.4	59* a	2	70-130/25
75-34-3	1,1-Dichloroethane	50	55.1	110	55.3	111	0	70-130/25
107-06-2	1,2-Dichloroethane	50	52.9	106	52.7	105	0	70-130/25
75-35-4	1,1-Dichloroethene	50	54.0	108	52.8	106	2	70-130/25
156-59-2	cis-1,2-Dichloroethene	50	53.7	107	55.3	111	3	70-130/25
156-60-5	trans-1,2-Dichloroethene	50	50.7	101	53.6	107	6	70-130/25
78-87-5	1,2-Dichloropropane	50	54.2	108	54.7	109	1	70-130/25
142-28-9	1,3-Dichloropropane	50	50.6	101	51.8	104	2	70-130/25
594-20-7	2,2-Dichloropropane	50	46.3	93	74.1	148* a	46* a	70-130/25
563-58-6	1,1-Dichloropropene	50	55.8	112	56.4	113	1	70-130/25
10061-01-5	cis-1,3-Dichloropropene	50	48.7	97	51.4	103	5	70-130/25

Blank Spike/Blank Spike Duplicate Summary

Page 2 of 3

Job Number: M87885**Account:** LEA Loureiro Eng. Associates**Project:** UTC: F&H Post Remediation GW Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSP1418-BS	P42949.D	1	12/16/09	AMY	n/a	n/a	MSP1418
MSP1418-BSD	P42950.D	1	12/16/09	AMY	n/a	n/a	MSP1418

The QC reported here applies to the following samples:**Method:** SW846 8260B

M87885-1, M87885-3, M87885-5, M87885-7, M87885-9, M87885-10, M87885-12, M87885-14, M87885-16

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	50	48.6	97	55.0	110	12	70-130/25
100-41-4	Ethylbenzene	50	52.8	106	54.5	109	3	70-130/25
76-13-1	Freon 113	50	51.2	102	52.4	105	2	70-130/25
87-68-3	Hexachlorobutadiene	50	47.4	95	46.7	93	1	70-130/25
591-78-6	2-Hexanone	50	43.0	86	46.2	92	7	70-130/25
98-82-8	Isopropylbenzene	50	59.6	119	60.4	121	1	70-130/25
99-87-6	p-Isopropyltoluene	50	52.5	105	53.2	106	1	70-130/25
1634-04-4	Methyl Tert Butyl Ether	50	54.1	108	58.7	117	8	70-130/25
108-10-1	4-Methyl-2-pentanone (MIBK)	50	48.2	96	48.2	96	0	70-130/25
74-95-3	Methylene bromide	50	52.1	104	52.5	105	1	70-130/25
75-09-2	Methylene chloride	50	51.0	102	50.2	100	2	70-130/25
91-20-3	Naphthalene	50	36.2	72	38.7	77	7	70-130/25
103-65-1	n-Propylbenzene	50	52.4	105	53.6	107	2	70-130/25
100-42-5	Styrene	50	47.3	95	48.5	97	3	70-130/25
630-20-6	1,1,1,2-Tetrachloroethane	50	49.1	98	49.6	99	1	70-130/25
79-34-5	1,1,2,2-Tetrachloroethane	50	51.1	102	51.0	102	0	70-130/25
127-18-4	Tetrachloroethene	50	48.7	97	49.2	98	1	70-130/25
109-99-9	Tetrahydrofuran	50	50.2	100	48.3	97	4	70-130/25
108-88-3	Toluene	50	56.6	113	57.5	115	2	70-130/25
110-57-6	Trans-1,4-Dichloro-2-Butene	50	44.2	88	48.2	96	9	70-130/25
87-61-6	1,2,3-Trichlorobenzene	50	43.9	88	43.6	87	1	70-130/25
120-82-1	1,2,4-Trichlorobenzene	50	44.1	88	44.0	88	0	70-130/25
71-55-6	1,1,1-Trichloroethane	50	55.2	110	55.5	111	1	70-130/25
79-00-5	1,1,2-Trichloroethane	50	53.4	107	53.8	108	1	70-130/25
79-01-6	Trichloroethene	50	52.6	105	54.3	109	3	70-130/25
75-69-4	Trichlorofluoromethane	50	47.9	96	48.4	97	1	70-130/25
96-18-4	1,2,3-Trichloropropane	50	46.2	92	47.0	94	2	70-130/25
95-63-6	1,2,4-Trimethylbenzene	50	51.3	103	52.0	104	1	70-130/25
108-67-8	1,3,5-Trimethylbenzene	50	51.2	102	51.9	104	1	70-130/25
75-01-4	Vinyl chloride	50	53.9	108	54.3	109	1	70-130/25
	m,p-Xylene	100	96.4	96	98.9	99	3	70-130/25
95-47-6	o-Xylene	50	48.3	97	49.3	99	2	70-130/25

Blank Spike/Blank Spike Duplicate Summary

Page 3 of 3

Job Number: M87885

Account: LEA Loureiro Eng. Associates

Project: UTC: F&H Post Remediation GW Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSP1418-BS	P42949.D	1	12/16/09	AMY	n/a	n/a	MSP1418
MSP1418-BSD	P42950.D	1	12/16/09	AMY	n/a	n/a	MSP1418

The QC reported here applies to the following samples:

Method: SW846 8260B

M87885-1, M87885-3, M87885-5, M87885-7, M87885-9, M87885-10, M87885-12, M87885-14, M87885-16

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	109%	107%	70-130%
2037-26-5	Toluene-D8	108%	108%	70-130%
460-00-4	4-Bromofluorobenzene	110%	110%	70-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: M87885

Account: LEA Loureiro Eng. Associates

Project: UTC: F&H Post Remediation GW Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M87885-3MS	P42973.D	5	12/16/09	AMY	n/a	n/a	MSP1418
M87885-3MSD	P42974.D	5	12/16/09	AMY	n/a	n/a	MSP1418
M87885-3	P42954.D	1	12/16/09	AMY	n/a	n/a	MSP1418

The QC reported here applies to the following samples:

Method: SW846 8260B

M87885-1, M87885-3, M87885-5, M87885-7, M87885-9, M87885-10, M87885-12, M87885-14, M87885-16

CAS No.	Compound	M87885-3 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	250	225	90	144	58* a	44* a	70-130/30
107-13-1	Acrylonitrile	ND	1250	1360	109	1280	102	6	70-130/30
71-43-2	Benzene	ND	250	272	109	260	104	5	70-130/30
108-86-1	Bromobenzene	ND	250	257	103	256	102	0	70-130/30
75-27-4	Bromodichloromethane	ND	250	247	99	248	99	0	70-130/30
75-25-2	Bromoform	ND	250	215	86	226	90	5	70-130/30
74-83-9	Bromomethane	ND	250	181	72	205	82	12	70-130/30
78-93-3	2-Butanone (MEK)	ND	250	242	97	173	69* b	33* c	70-130/30
104-51-8	n-Butylbenzene	ND	250	232	93	225	90	3	70-130/30
135-98-8	sec-Butylbenzene	ND	250	249	100	241	96	3	70-130/30
98-06-6	tert-Butylbenzene	ND	250	238	95	232	93	3	70-130/30
75-15-0	Carbon disulfide	ND	250	235	94	229	92	3	70-130/30
56-23-5	Carbon tetrachloride	ND	250	245	98	238	95	3	70-130/30
108-90-7	Chlorobenzene	ND	250	238	95	239	96	0	70-130/30
75-00-3	Chloroethane	ND	250	227	91	211	84	7	70-130/30
67-66-3	Chloroform	ND	250	272	109	264	106	3	70-130/30
74-87-3	Chloromethane	ND	250	192	77	168	67* b	13	70-130/30
95-49-8	o-Chlorotoluene	ND	250	268	107	265	106	1	70-130/30
106-43-4	p-Chlorotoluene	ND	250	264	106	261	104	1	70-130/30
96-12-8	1,2-Dibromo-3-chloropropane	ND	250	232	93	232	93	0	70-130/30
124-48-1	Dibromochloromethane	ND	250	239	96	240	96	0	70-130/30
106-93-4	1,2-Dibromoethane	ND	250	243	97	246	98	1	70-130/30
95-50-1	1,2-Dichlorobenzene	ND	250	246	98	245	98	0	70-130/30
541-73-1	1,3-Dichlorobenzene	ND	250	246	98	244	98	1	70-130/30
106-46-7	1,4-Dichlorobenzene	ND	250	235	94	234	94	0	70-130/30
75-71-8	Dichlorodifluoromethane	ND	250	114	46* a	105	42* a	8	70-130/30
75-34-3	1,1-Dichloroethane	ND	250	268	107	258	103	4	70-130/30
107-06-2	1,2-Dichloroethane	ND	250	256	102	249	100	3	70-130/30
75-35-4	1,1-Dichloroethene	ND	250	252	101	236	94	7	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND	250	267	107	261	104	2	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND	250	257	103	249	100	3	70-130/30
78-87-5	1,2-Dichloropropane	ND	250	270	108	263	105	3	70-130/30
142-28-9	1,3-Dichloropropane	ND	250	245	98	248	99	1	70-130/30
594-20-7	2,2-Dichloropropane	ND	250	237	95	304	122	25	70-130/30
563-58-6	1,1-Dichloropropene	ND	250	272	109	265	106	3	70-130/30
10061-01-5	cis-1,3-Dichloropropene	ND	250	245	98	249	100	2	70-130/30

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: M87885

Account: LEA Loureiro Eng. Associates

Project: UTC: F&H Post Remediation GW Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M87885-3MS	P42973.D	5	12/16/09	AMY	n/a	n/a	MSP1418
M87885-3MSD	P42974.D	5	12/16/09	AMY	n/a	n/a	MSP1418
M87885-3	P42954.D	1	12/16/09	AMY	n/a	n/a	MSP1418

The QC reported here applies to the following samples:

Method: SW846 8260B

M87885-1, M87885-3, M87885-5, M87885-7, M87885-9, M87885-10, M87885-12, M87885-14, M87885-16

CAS No.	Compound	M87885-3 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	ND	250	247	99	266	106	7	70-130/30
100-41-4	Ethylbenzene	ND	250	268	107	265	106	1	70-130/30
76-13-1	Freon 113	ND	250	231	92	217	87	6	70-130/30
87-68-3	Hexachlorobutadiene	ND	250	242	97	239	96	1	70-130/30
591-78-6	2-Hexanone	ND	250	210	84	211	84	0	70-130/30
98-82-8	Isopropylbenzene	ND	250	294	118	290	116	1	70-130/30
99-87-6	p-Isopropyltoluene	ND	250	254	102	249	100	2	70-130/30
1634-04-4	Methyl Tert Butyl Ether	ND	250	282	113	286	114	1	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	250	228	91	224	90	2	70-130/30
74-95-3	Methylene bromide	ND	250	258	103	256	102	1	70-130/30
75-09-2	Methylene chloride	ND	250	242	97	233	93	4	70-130/30
91-20-3	Naphthalene	ND	250	352	141* b	249	100	34* c	70-130/30
103-65-1	n-Propylbenzene	ND	250	257	103	251	100	2	70-130/30
100-42-5	Styrene	ND	250	242	97	243	97	0	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND	250	249	100	248	99	0	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND	250	242	97	244	98	1	70-130/30
127-18-4	Tetrachloroethene	ND	250	241	96	240	96	0	70-130/30
109-99-9	Tetrahydrofuran	ND	250	224	90	213	85	5	70-130/30
108-88-3	Toluene	ND	250	288	115	279	112	3	70-130/30
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	250	208	83	217	87	4	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND	250	247	99	237	95	4	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND	250	246	98	236	94	4	70-130/30
71-55-6	1,1,1-Trichloroethane	ND	250	268	107	258	103	4	70-130/30
79-00-5	1,1,2-Trichloroethane	ND	250	266	106	265	106	0	70-130/30
79-01-6	Trichloroethene	ND	250	268	107	256	102	5	70-130/30
75-69-4	Trichlorofluoromethane	ND	250	215	86	200	80	7	70-130/30
96-18-4	1,2,3-Trichloropropane	ND	250	216	86	220	88	2	70-130/30
95-63-6	1,2,4-Trimethylbenzene	ND	250	266	106	250	100	6	70-130/30
108-67-8	1,3,5-Trimethylbenzene	ND	250	256	102	248	99	3	70-130/30
75-01-4	Vinyl chloride	ND	250	222	89	215	86	3	70-130/30
	m,p-Xylene	ND	500	495	99	482	96	3	70-130/30
95-47-6	o-Xylene	ND	250	247	99	244	98	1	70-130/30

Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: M87885

Account: LEA Loureiro Eng. Associates

Project: UTC: F&H Post Remediation GW Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
M87885-3MS	P42973.D	5	12/16/09	AMY	n/a	n/a	MSP1418
M87885-3MSD	P42974.D	5	12/16/09	AMY	n/a	n/a	MSP1418
M87885-3	P42954.D	1	12/16/09	AMY	n/a	n/a	MSP1418

The QC reported here applies to the following samples:

Method: SW846 8260B

M87885-1, M87885-3, M87885-5, M87885-7, M87885-9, M87885-10, M87885-12, M87885-14, M87885-16

CAS No.	Surrogate Recoveries	MS	MSD	M87885-3	Limits
1868-53-7	Dibromofluoromethane	106%	105%	122%	70-130%
2037-26-5	Toluene-D8	109%	110%	109%	70-130%
460-00-4	4-Bromofluorobenzene	109%	109%	116%	70-130%

- (a) Outside control limits. Blank Spike meets program technical requirements.
- (b) Outside control limits due to possible matrix interference. Refer to Blank Spike.
- (c) High RPD due to possible matrix interference and/or sample non-homogeneity.

Volatile Internal Standard Area Summary

Page 1 of 1

Job Number: M87885
Account: LEA Loureiro Eng. Associates
Project: UTC: F&H Post Remediation GW Monitoring

Check Std: MSP1417-CC1415
Lab File ID: P42921.D
Instrument ID: GCMSP
Injection Date: 12/15/09
Injection Time: 22:52
Method: SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	255744	8.62	423909	9.48	224238	12.70	179027	15.26	64563	6.41
Upper Limit ^a	511488	9.12	847818	9.98	448476	13.20	358054	15.76	129126	6.91
Lower Limit ^b	127872	8.12	211955	8.98	112119	12.20	89514	14.76	32282	5.91

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSP1417-BS	256113	8.62	426197	9.48	225325	12.70	178546	15.26	60730	6.37
MSP1417-MB	224942	8.62	375984	9.48	188441	12.71	140562	15.26	50941	6.42
ZZZZZZ	210793	8.62	359184	9.48	185801	12.71	132720	15.26	49203	6.42
ZZZZZZ	202918	8.62	351823	9.48	180208	12.71	122378	15.26	50081	6.45
ZZZZZZ	192608	8.63	325499	9.48	168040	12.71	110194	15.27	48414	6.45
M87880-7	174010	8.62	307099	9.48	157429	12.71	103220	15.27	43977	6.43
ZZZZZZ	164561	8.62	290826	9.48	147738	12.71	89666	15.27	39849	6.44
ZZZZZZ	156735	8.62	281017	9.48	148317	12.71	94790	15.27	40616	6.45
ZZZZZZ	153574	8.62	270505	9.48	144769	12.71	90022	15.26	40578	6.45
M87885-14 ^c	139845	8.62	257366	9.48	136627	12.71	84288 ^d	15.27	29659 ^d	6.42
ZZZZZZ	143173	8.62	255189	9.48	137488	12.71	112175	15.26	37235	6.45
M87880-7MS	179896	8.62	318441	9.47	178804	12.70	140427	15.26	42958	6.43
M87880-7MSD	187427	8.62	331645	9.48	181594	12.70	137613	15.26	31708 ^e	6.44

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

- (a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Confirmation run for internal standard areas.
(d) Outside control limits due to possible matrix interference. Confirmed by reanalysis.
(e) Outside control limits. No target analytes are associated with this internal standard.

Volatile Internal Standard Area Summary

Page 1 of 1

Job Number: M87885
Account: LEA Loureiro Eng. Associates
Project: UTC: F&H Post Remediation GW Monitoring

Check Std: MSP1418-CC1415
Lab File ID: P42949.D
Instrument ID: GCMSP
Injection Date: 12/16/09
Injection Time: 12:11
Method: SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	198764	8.62	346397	9.48	190389	12.70	140940	15.26	53228	6.38
Upper Limit ^a	397528	9.12	692794	9.98	380778	13.20	281880	15.76	106456	6.88
Lower Limit ^b	99382	8.12	173199	8.98	95195	12.20	70470	14.76	26614	5.88

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSP1418-BS	198764	8.62	346397	9.48	190389	12.70	140940	15.26	53228	6.38
MSP1418-BSD	203529	8.62	354252	9.47	192427	12.70	144319	15.26	51831	6.44
MSP1418-MB	163039	8.63	285374	9.48	149242	12.71	94512	15.26	44505	6.46
M87885-1	154940	8.63	271968	9.48	144766	12.71	88647	15.27	41907	6.44
M87885-3	150560	8.62	275882	9.48	146051	12.71	90514	15.26	40792	6.45
M87885-5	146059	8.63	261800	9.48	136792	12.71	83900	15.26	42540	6.45
M87885-7	143757	8.63	257268	9.48	135780	12.71	81624	15.27	39939	6.45
M87885-9	142731	8.62	258526	9.48	138792	12.71	83820	15.26	36849	6.45
M87885-10	141565	8.62	251434	9.48	137909	12.71	83113	15.26	35904	6.46
M87885-12	138473	8.62	246793	9.48	134181	12.71	82140	15.27	38876	6.45
M87885-14	133780	8.63	241569	9.48	123209	12.71	68043 ^c	15.27	36457	6.44
M87885-16	134541	8.62	248985	9.48	132739	12.71	80315	15.27	38353	6.45
ZZZZZZ	191430	8.62	333825	9.47	210985	12.70	165612	15.26	64336	6.39
ZZZZZZ	176972	8.63	307309	9.48	163537	12.71	105590	15.26	47895	6.44
ZZZZZZ	162733	8.62	292692	9.48	151658	12.71	98550	15.26	45806	6.44
ZZZZZZ	153039	8.63	274197	9.48	144147	12.71	86279	15.26	39258	6.46
ZZZZZZ	148449	8.62	265772	9.48	146935	12.71	120913	15.26	41663	6.44
ZZZZZZ	173825	8.62	306260	9.48	163682	12.70	133737	15.26	43948	6.40
ZZZZZZ	174685	8.62	311428	9.48	163504	12.71	104850	15.26	43823	6.46
ZZZZZZ	161455	8.62	287514	9.48	152307	12.71	97020	15.26	33656	6.47
ZZZZZZ	175279	8.62	311749	9.48	169031	12.70	138335	15.26	43176	6.42
M87885-3MS	223704	8.62	388777	9.48	216900	12.70	161874	15.26	48306	6.38
M87885-3MSD	234098	8.62	402982	9.47	221149	12.70	167891	15.26	48217	6.42

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Outside control limits due to possible matrix interference. Confirmed by reanalysis.

Volatile Surrogate Recovery Summary

Page 1 of 1

Job Number: M87885

Account: LEA Loureiro Eng. Associates

Project: UTC: F&H Post Remediation GW Monitoring

Method: SW846 8260B

Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
M87885-1	P42953.D	113.0	109.0	114.0
M87885-3	P42954.D	122.0	109.0	116.0
M87885-5	P42955.D	120.0	108.0	113.0
M87885-7	P42956.D	122.0	108.0	115.0
M87885-9	P42957.D	125.0	110.0	113.0
M87885-10	P42958.D	122.0	112.0	113.0
M87885-12	P42959.D	126.0	113.0	111.0
M87885-14	P42939.D	125.0	110.0	111.0
M87885-14	P42960.D	128.0	109.0	116.0
M87885-16	P42961.D	128.0	112.0	114.0
M87885-3MS	P42973.D	106.0	109.0	109.0
M87885-3MSD	P42974.D	105.0	110.0	109.0
MSP1418-BS	P42949.D	109.0	108.0	110.0
MSP1418-BSD	P42950.D	107.0	108.0	110.0
MSP1418-MB	P42952.D	115.0	108.0	115.0

Surrogate Compounds

Recovery Limits

S1 = Dibromofluoromethane

70-130%

S2 = Toluene-D8

70-130%

S3 = 4-Bromofluorobenzene

70-130%



GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Page 1 of 1

Job Number: M87885

Account: LEA Loureiro Eng. Associates

Project: UTC: F&H Post Remediation GW Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP20176-MB	BC35662.D	1	12/18/09	KD	12/11/09	OP20176	GBC1822

The QC reported here applies to the following samples:

Method: CT-ETPH 7/06

M87885-1, M87885-3, M87885-5, M87885-7, M87885-10, M87885-12, M87885-14, M87885-16

CAS No.	Compound	Result	RL	Units	Q
	CT-DRO (C9-C36)	ND	0.080	mg/l	

CAS No.	Surrogate Recoveries	Limits
3386-33-2	1-Chlorooctadecane	90% 50-149%

Method Blank Summary

Page 1 of 1

Job Number: M87885

Account: LEA Loureiro Eng. Associates

Project: UTC: F&H Post Remediation GW Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP20169-MB	EF72128.D	1	12/13/09	SL	12/10/09	OP20169	GEF3307

The QC reported here applies to the following samples:

Method: SW846 8082

M87885-1, M87885-3, M87885-5, M87885-7, M87885-10, M87885-12, M87885-14, M87885-16

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	ug/l	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	67% 30-150%
877-09-8	Tetrachloro-m-xylene	69% 30-150%
2051-24-3	Decachlorobiphenyl	73% 30-150%
2051-24-3	Decachlorobiphenyl	75% 30-150%

Blank Spike Summary

Job Number: M87885
Account: LEA Loureiro Eng. Associates
Project: UTC: F&H Post Remediation GW Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP20176-BS	BC35666.D	1	12/18/09	KD	12/11/09	OP20176	GBC1822

The QC reported here applies to the following samples: Method: CT-ETPH 7/06

M87885-1, M87885-3, M87885-5, M87885-7, M87885-10, M87885-12, M87885-14, M87885-16

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	CT-DRO (C9-C36)	0.7	0.565	81	60-120

CAS No.	Surrogate Recoveries	BSP	Limits
3386-33-2	1-Chlorooctadecane	90%	50-149%

6.2.1
6

Blank Spike Summary

Page 1 of 1

Job Number: M87885

Account: LEA Loureiro Eng. Associates

Project: UTC: F&H Post Remediation GW Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP20169-BS	EF72129.D	1	12/13/09	SL	12/10/09	OP20169	GEF3307

The QC reported here applies to the following samples:

Method: SW846 8082

M87885-1, M87885-3, M87885-5, M87885-7, M87885-10, M87885-12, M87885-14, M87885-16

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
12674-11-2	Aroclor 1016	2	1.6	80	40-140
11104-28-2	Aroclor 1221		ND		40-140
11141-16-5	Aroclor 1232		ND		40-140
53469-21-9	Aroclor 1242		ND		40-140
12672-29-6	Aroclor 1248		ND		40-140
11097-69-1	Aroclor 1254		ND		40-140
11096-82-5	Aroclor 1260	2	1.6	80	40-140
37324-23-5	Aroclor 1262		ND		40-140
11100-14-4	Aroclor 1268		ND		40-140

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	77%	30-150%
877-09-8	Tetrachloro-m-xylene	81%	30-150%
2051-24-3	Decachlorobiphenyl	77%	30-150%
2051-24-3	Decachlorobiphenyl	79%	30-150%

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: M87885

Account: LEA Loureiro Eng. Associates

Project: UTC: F&H Post Remediation GW Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP20176-MS	BC35668.D	1	12/18/09	KD	12/11/09	OP20176	GBC1822
OP20176-MSD	BC35670.D	1	12/18/09	KD	12/11/09	OP20176	GBC1822
M87697-20	BC35672.D	1	12/18/09	KD	12/11/09	OP20176	GBC1822

The QC reported here applies to the following samples:

Method: CT-ETPH 7/06

M87885-1, M87885-3, M87885-5, M87885-7, M87885-10, M87885-12, M87885-14, M87885-16

CAS No.	Compound	M87697-20 mg/l	Spike Q	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	CT-DRO (C9-C36)	ND	0.7	0.465	66	0.594	85	24	50-129/26

CAS No.	Surrogate Recoveries	MS	MSD	M87697-20	Limits
3386-33-2	1-Chlorooctadecane	91%	86%	83%	50-149%

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: M87885

Account: LEA Loureiro Eng. Associates

Project: UTC: F&H Post Remediation GW Monitoring

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP20169-MS	EF72130.D	1	12/13/09	SL	12/10/09	OP20169	GEF3307
OP20169-MSD	EF72131.D	1	12/13/09	SL	12/10/09	OP20169	GEF3307
M87697-18	EF72132.D	1	12/13/09	SL	12/10/09	OP20169	GEF3307

The QC reported here applies to the following samples:

Method: SW846 8082

M87885-1, M87885-3, M87885-5, M87885-7, M87885-10, M87885-12, M87885-14, M87885-16

CAS No.	Compound	M87697-18 ug/l	Spike Q	ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND	2		1.4	70	1.4	70	0	40-140/50
11104-28-2	Aroclor 1221	ND			ND		ND		nc	40-140/50
11141-16-5	Aroclor 1232	ND			ND		ND		nc	40-140/50
53469-21-9	Aroclor 1242	ND			ND		ND		nc	40-140/50
12672-29-6	Aroclor 1248	ND			ND		ND		nc	40-140/50
11097-69-1	Aroclor 1254	ND			ND		ND		nc	40-140/50
11096-82-5	Aroclor 1260	ND	2		1.5	75	1.7	85	13	40-140/50
37324-23-5	Aroclor 1262	ND			ND		ND		nc	40-140/50
11100-14-4	Aroclor 1268	ND			ND		ND		nc	40-140/50

CAS No.	Surrogate Recoveries	MS	MSD	M87697-18	Limits
877-09-8	Tetrachloro-m-xylene	78%	67%	74%	30-150%
877-09-8	Tetrachloro-m-xylene	80%	68%	78%	30-150%
2051-24-3	Decachlorobiphenyl	77%	87%	76%	30-150%
2051-24-3	Decachlorobiphenyl	78%	89%	78%	30-150%

Semivolatile Surrogate Recovery Summary

Job Number: M87885
Account: LEA Loureiro Eng. Associates
Project: UTC: F&H Post Remediation GW Monitoring

Method: CT-ETPH 7/06	Matrix: AQ
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a
M87885-1	BC35690.D	100.0
M87885-3	BC35692.D	99.0
M87885-5	BC35693.D	105.0
M87885-7	BC35694.D	116.0
M87885-10	BC35695.D	105.0
M87885-12	BC35696.D	95.0
M87885-14	BC35697.D	104.0
M87885-16	BC35698.D	103.0
OP20176-BS	BC35666.D	90.0
OP20176-MB	BC35662.D	90.0
OP20176-MS	BC35668.D	91.0
OP20176-MSD	BC35670.D	86.0

Surrogate Compounds	Recovery Limits
S1 = 1-Chlorooctadecane	50-149%

(a) Recovery from GC signal #1

Semivolatile Surrogate Recovery Summary

Page 1 of 1

Job Number: M87885

Account: LEA Loureiro Eng. Associates

Project: UTC: F&H Post Remediation GW Monitoring

Method: SW846 8082

Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S1 ^b	S2 ^a	S2 ^b
M87885-1	EF72140.D	62.0	63.0	63.0	66.0
M87885-3	EF72141.D	32.0	32.0	61.0	63.0
M87885-5	EF72142.D	65.0	63.0	72.0	74.0
M87885-7	EF72143.D	73.0	74.0	59.0	62.0
M87885-10	EF72144.D	58.0	62.0	69.0	72.0
M87885-12	EF72145.D	55.0	55.0	58.0	61.0
M87885-14	EF72146.D	69.0	72.0	66.0	69.0
M87885-16	EF72147.D	72.0	72.0	83.0	90.0
OP20169-BS	EF72129.D	77.0	81.0	77.0	79.0
OP20169-MB	EF72128.D	67.0	69.0	73.0	75.0
OP20169-MS	EF72130.D	78.0	80.0	77.0	78.0
OP20169-MSD	EF72131.D	67.0	68.0	87.0	89.0

Surrogate Compounds

Recovery Limits

S1 = Tetrachloro-m-xylene

30-150%

S2 = Decachlorobiphenyl

30-150%

(a) Recovery from GC signal #1

(b) Recovery from GC signal #2

6.4.2

6



Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M87885
Account: LEA - Loureiro Eng. Associates
Project: UTC: F&H Post Remediation GW Monitoring

QC Batch ID: MP14558
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 12/09/09

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	27	40		
Antimony	6.0	1.4	1.6		
Arsenic	10	1	1.8	-0.10	<10
Barium	200	.57	1.1	1.6	<200
Beryllium	4.0	.15	.4		
Boron	100	.65	2.3		
Cadmium	4.0	.24	1.9	0.10	<4.0
Calcium	5000	7.6	15		
Chromium	10	.81	1.1	0.0	<10
Cobalt	50	.25	.3		
Copper	25	2.2	4	1.4	<25
Gold	50	1.1	4.2		
Iron	100	3.7	13		
Lead	5.0	1.1	2.7	0.60	<5.0
Magnesium	5000	37	77		
Manganese	15	.12	1.1		
Molybdenum	100	.22	.8		
Nickel	40	.24	1.3	0.30	<40
Palladium	50	2.2	4		
Platinum	50	9.3	13		
Potassium	5000	39	46		
Selenium	10	1.9	3.5	-0.70	<10
Silicon	100	8.9	36		
Silver	5.0	.54	1.3	-0.10	<5.0
Sodium	5000	61	160		
Strontium	10	.24	.3		
Thallium	10	1.2	1.3		
Tin	100	.65	1.3		
Titanium	50	.74	.8		
Tungsten	100	5.6	8		
Vanadium	30	.68	1.6		
Zinc	20	.74	1.5	1.3	<20

Associated samples MP14558: M87885-2, M87885-4, M87885-6, M87885-8, M87885-11, M87885-13, M87885-15, M87885-17

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M87885
Account: LEA - Loureiro Eng. Associates
Project: UTC: F&H Post Remediation GW Monitoring

QC Batch ID: MP14558
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M87885
 Account: LEA - Loureiro Eng. Associates
 Project: UTC: F&H Post Remediation GW Monitoring

QC Batch ID: MP14558
 Matrix Type: AQUEOUS

Methods: SW846 6010B
 Units: ug/l

Prep Date: 12/09/09 12/09/09

Metal	M87885-2 Original MS		Spikelot MPICP	% Rec	QC Limits	M87885-2 Original DUP		RPD	QC Limits
Aluminum									
Antimony									
Arsenic	0.0	544	500	108.8	75-125	0.0	0.0	NC	0-20
Barium	22.8	2000	2000	98.9	75-125	22.8	24.0	5.1	0-20
Beryllium									
Boron									
Cadmium	0.0	532	500	106.4	75-125	0.0	0.0	NC	0-20
Calcium									
Chromium	0.0	493	500	98.6	75-125	0.0	0.0	NC	0-20
Cobalt									
Copper	0.0	514	500	102.8	75-125	0.0	0.0	NC	0-20
Gold									
Iron									
Lead	0.0	1050	1000	105.0	75-125	0.0	1.3	200.0(a)	0-20
Magnesium									
Manganese									
Molybdenum									
Nickel	0.50	521	500	104.1	75-125	0.50	0.70	33.3 (a)	0-20
Palladium									
Platinum									
Potassium									
Selenium	0.0	549	500	109.8	75-125	0.0	0.0	NC	0-20
Silicon									
Silver	0.0	205	200	102.5	75-125	0.0	0.0	NC	0-20
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Tungsten									
Vanadium									
Zinc	1.9	530	500	105.6	75-125	1.9	1.9	0.0	0-20

Associated samples MP14558: M87885-2, M87885-4, M87885-6, M87885-8, M87885-11, M87885-13, M87885-15, M87885-17

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M87885
Account: LEA - Loureiro Eng. Associates
Project: UTC: F&H Post Remediation GW Monitoring

QC Batch ID: MP14558
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) RPD acceptable due to low duplicate and sample concentrations.

7.1.2

7

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M87885
 Account: LEA - Loureiro Eng. Associates
 Project: UTC: F&H Post Remediation GW Monitoring

QC Batch ID: MP14558
 Matrix Type: AQUEOUS

Methods: SW846 6010B
 Units: ug/l

Prep Date: 12/09/09 12/09/09

Metal	BSD Result	Spikelot MPICP	% Rec	BSD RPD	QC Limit	BSP Result	Spikelot MPICP	% Rec	QC Limits
Aluminum									
Antimony									
Arsenic	531	500	106.2	1.1	20	537	500	107.4	80-120
Barium	2020	2000	101.0	1.5	20	2050	2000	102.5	80-120
Beryllium									
Boron									
Cadmium	529	500	105.8	0.0	20	529	500	105.8	80-120
Calcium									
Chromium	486	500	97.2	3.4	20	503	500	100.6	80-120
Cobalt									
Copper	484	500	96.8	4.4	20	506	500	101.2	80-120
Gold									
Iron									
Lead	1030	1000	103.0	1.9	20	1050	1000	105.0	80-120
Magnesium									
Manganese									
Molybdenum									
Nickel	513	500	102.6	1.2	20	519	500	103.8	80-120
Palladium									
Platinum									
Potassium									
Selenium	531	500	106.2	3.0	20	547	500	109.4	80-120
Silicon									
Silver	198	200	99.0	4.0	20	206	200	103.0	80-120
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Tungsten									
Vanadium									
Zinc	516	500	103.2	0.8	20	520	500	104.0	80-120

Associated samples MP14558: M87885-2, M87885-4, M87885-6, M87885-8, M87885-11, M87885-13, M87885-15, M87885-17

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M87885

Account: LEA - Loureiro Eng. Associates

Project: UTC: F&H Post Remediation GW Monitoring

QC Batch ID: MP14558

Methods: SW846 6010B

Matrix Type: AQUEOUS

Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: M87885
 Account: LEA - Loureiro Eng. Associates
 Project: UTC: F&H Post Remediation GW Monitoring

QC Batch ID: MP14558
 Matrix Type: AQUEOUS

Methods: SW846 6010B
 Units: ug/l

Prep Date: 12/09/09

Metal	M87885-2 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic	0.00	0.00	NC	0-10
Barium	22.8	27.5	20.6 (a)	0-10
Beryllium				
Boron				
Cadmium	0.00	0.00	NC	0-10
Calcium				
Chromium	0.00	0.00	NC	0-10
Cobalt				
Copper	0.00	0.00	NC	0-10
Gold				
Iron				
Lead	0.00	0.00	NC	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel	0.500	0.00	100.0 (a)	0-10
Palladium				
Platinum				
Potassium				
Selenium	0.00	0.00	NC	0-10
Silicon				
Silver	0.00	0.00	NC	0-10
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium				
Zinc	1.90	0.00	100.0 (a)	0-10

Associated samples MP14558: M87885-2, M87885-4, M87885-6, M87885-8, M87885-11, M87885-13, M87885-15, M87885-17

SERIAL DILUTION RESULTS SUMMARY

Login Number: M87885
Account: LEA - Loureiro Eng. Associates
Project: UTC: F&H Post Remediation GW Monitoring

QC Batch ID: MP14558
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

7.1.4

7

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: M87885
Account: LEA - Loureiro Eng. Associates
Project: UTC: F&H Post Remediation GW Monitoring

QC Batch ID: MP14563
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 12/10/09

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.035	.048	0.015	<0.20

Associated samples MP14563: M87885-2, M87885-4, M87885-6, M87885-8, M87885-11, M87885-13, M87885-15, M87885-17

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: M87885
 Account: LEA - Loureiro Eng. Associates
 Project: UTC: F&H Post Remediation GW Monitoring

QC Batch ID: MP14563
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 12/10/09 12/10/09

Metal	M87880-4 Original MS		Spikelot HGRWS1	% Rec	QC Limits	M87880-4 Original DUP		RPD	QC Limits
Mercury	0.0	3.1	3	103.3	75-125	0.0	0.0	NC	0-20

Associated samples MP14563: M87885-2, M87885-4, M87885-6, M87885-8, M87885-11, M87885-13, M87885-15, M87885-17

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: M87885
 Account: LEA - Loureiro Eng. Associates
 Project: UTC: F&H Post Remediation GW Monitoring

QC Batch ID: MP14563
 Matrix Type: AQUEOUS

Methods: SW846 7470A
 Units: ug/l

Prep Date: 12/10/09 12/10/09

Metal	BSP Result	Spikelot HGRWS1	% Rec	QC Limits	BSD Result	Spikelot HGRWS1	% Rec	BSD RPD	QC Limit
Mercury	3.1	3	103.3	80-120	3.0	3	100.0	3.3	20

Associated samples MP14563: M87885-2, M87885-4, M87885-6, M87885-8, M87885-11, M87885-13, M87885-15, M87885-17

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

Appendix C

Quality Assurance/Quality Control Documentation

APPENDIX C

QUALITY ASSURANCE AND QUALITY CONTROL PROCEDURES AND EVALUATION

1. QUALITY ASSURANCE /QUALITY CONTROL SUMMARY

During the course of the 2009 Post-Remediation Groundwater Monitoring activities, analytical and observational data were obtained for F&H Buildings Remediation Area (hereinafter referred to as the “Project Area”). These data included analytical data on groundwater samples, field activities documentation, sample tracking documentation, and other documentation associated with sample collection and analysis.

During the course of groundwater monitoring activities, the need to maintain accurate and complete documentation was a paramount concern. Included in this document is a description of the activities undertaken to document, manage, verify, organize, and present the data compiled; a discussion of the types and quantities of Quality Assurance/Quality Control (QA/QC) samples that were collected during field activities; and an evaluation of the analytical data generated as a result of laboratory QA/QC procedures. The evaluation of laboratory QA/QC information includes a Data Quality Assessment (DQA) and a Data Usability Evaluation (DUE) that was performed in accordance with the methodology described in the November 2007 guidance document entitled, *Reasonable Confidence Protocols* and presented in more detail in the May 2009 document entitled *Laboratory Quality Assurance Quality Control, Data Quality Assessment, Data Usability Evaluation Guidance Document* published by the Connecticut Department of Environmental Protection (CTDEP).



APPENDIX C

QUALITY ASSURANCE AND QUALITY CONTROL PROCEDURES AND EVALUATION

2. DATA MANAGEMENT PROCEDURES

This section has been organized to present those activities performed by personnel to document the record of post-remediation groundwater monitoring activities performed in the field and discuss the QA/QC activities performed in the field. These discussions are followed by a description of the activities undertaken by personnel in the office to ensure the necessary data have been accumulated, that the data have been properly managed, tracked, verified, entered into the database repository, presented appropriately, and at the conclusion of monitoring events, filed for future use.

2.1 Standard Operating Procedures

Prior to conducting groundwater monitoring activities at the Project Area, Standard Operating Procedures (SOPs) had been developed by Loureiro Engineering Associates, Inc. (LEA) for the most common procedures associated with the sampling and analysis of various media for environmental investigations. Development of these SOPs has taken into account the need for precision, accuracy, completeness, representativeness, and comparability of data.

Although it is understood that there are limits on data accuracy and precision that are inherent in the collection and analysis of samples and in the operation of measuring devices, adherence to standard procedures increases consistency and the level of confidence with which the data collected are evaluated. Data collected under standard procedures can also be used more reliably in comparing results over time on a given project or from other projects or published information.

Data evaluation is also dependent upon the representativeness of the samples or measurements collected and the completeness of information associated with collection of the data. Collection and measurement techniques identified in the SOPs have been designed to take these factors into account, thus increasing the level of confidence that can be placed in the data.

Although adherence to SOPs is imperative for the successful completion of any project, there will be instances where exceptions to the SOPs must be made to obtain reliable data. When exceptions are made, documentation of both the situation requiring deviation and the actual deviation in procedure was recorded in the field documentation.

Each SOP was developed by LEA personnel experienced in the performance of the specific activity. At least two senior-level people, one being the Director of Quality, reviewed the SOP



APPENDIX C

QUALITY ASSURANCE AND QUALITY CONTROL PROCEDURES AND EVALUATION

to ensure that the identified procedures satisfy the stated objectives and that the prescribed procedures are technically correct, appropriately applied, and in conformance with applicable regulatory criteria and standard practices. These individuals signified their approval by signing and dating the SOP.

SOPs for the following activities have been included as Attachment C-1 of this document.

- Low Flow Sampling;
- Liquid Sample Collection and Field Analysis; and
- Quality Assurance/Quality Control Measures for Field Activities.

2.2 Field Quality Assurance Procedures

Field QA/QC procedures begin with the use and maintenance of field equipment and instrumentation and include the proper calibration of the equipment.

2.2.1 Use and Maintenance of Field Equipment and Instrumentation

Field equipment and instruments were operated and maintained in a manner that is consistent with the manufacturer's recommended practices. Deviations from standard use of the equipment or required repairs or adaptations made in the field were noted in the Field Record and/or field logbook. Operation and maintenance manuals for equipment were kept in a single location that was known and accessible to personnel that would be likely to use the equipment.

Field personnel either returned equipment in a condition that permitted its optimal use on the following day of field operations, or notified the appropriate personnel so that repairs/replacements could be arranged in an expedient fashion. The use of expendable equipment was recorded and reported to appropriate personnel so replacements could be ordered in a timely manner and an adequate supply was available.

Prior to starting a particular field investigation, the field services manager or designated personnel ensured that adequate supplies and equipment were available for project completion. It was the responsibility of field personnel to inform the field services manager or other authorized personnel that supplies were depleted and that re-ordering was necessary.



APPENDIX C

QUALITY ASSURANCE AND QUALITY CONTROL PROCEDURES AND EVALUATION

2.2.2 Calibration Procedures and Frequency

Instruments and equipment were calibrated with sufficient frequency and in such a manner that accuracy and reproducibility of results were consistent with the appropriate manufacturer's specifications or project-specific requirements. Calibration was performed at intervals recommended by the manufacturer or more frequently, as conditions dictate. The field instruments that required calibration during the groundwater monitoring activities were the photoionization detector (PID); the pH, dissolved oxygen, and specific conductance sensors of the flow-through cells; and the turbidity meters. Documentation of the calibration that was performed was recorded on field documentation forms, analytical records, or other appropriate daily record of activities.

2.2.3 Decontamination

Decontamination procedures are described in applicable SOPs presented in Attachment C-1. These procedures were designed to avoid cross-contamination between samples, the transport of contaminated material between onsite locations, and the transport of contaminated material from onsite or off-site locations. As described in Section 3.2 of this appendix, equipment blanks were collected to confirm the efficiency of decontamination procedures.

2.3 Sample Tracking

Sample tracking activities focus on the timely assignment and tracking of information relevant to field samples collected during the groundwater sampling activities. Samples collected during the groundwater sampling activities were designated using the procedures discussed below.

Field sample tracking included the following tasks:

- Assignment of sample identification numbers and other sample identifiers to new samples to be taken, and entry to a tracking system;
- Production of sample bottle labels from the tracking system;
- Completion of chain-of-custody forms, and entry of this information to the tracking system;
- Entry of additional tracking dates to the tracking system;
- QA checking of the sample tracking information, and processing of change requests; and,



APPENDIX C

QUALITY ASSURANCE AND QUALITY CONTROL PROCEDURES AND EVALUATION

- Production of tracking reports and summary sheets, with distribution to appropriate project staff.

A computer-based sample-tracking system, based on a dBase[®] database computer program, was used for sample tracking.

2.3.1 Sample Location Identification

Samples were designated with location identifiers previously assigned using the procedure described in the SOPs included in Attachment C-1. In general, sample identification information included the sample type (e.g. monitoring well.); and the sample point number.

Monitoring wells have been provided with location identifiers using a systematic method to prevent duplication of location identifiers. Additionally, a two letter prefix identifying the project area (in this case “HB”) was also included in the location identifiers. For example, monitoring well number 40 is designated as HB-MW-01.

The system of location identifiers provides a relatively easy means of finding the referenced locations on Project Area drawings.

2.3.2 Sample Labeling and Custody

Prior to sample collection, project-specific sample numbers were obtained, and labels were generated with all required information, as noted in the sample collection SOPs. Each sample was labeled using waterproof ink on a computer-generated label, and sealed immediately after collection. At a minimum, each sample label contained the following information:

- Project number;
- Date;
- Sample number; and
- Time of sample collection.

In order to ensure accurate identification of all sample containers, sample labels and tags were firmly affixed to the sample container. The sampler was responsible for ensuring that the sample container was dry enough for the label to remain securely attached, or used a suitable transparent adhesive tape when the adhesive labels were not applicable or there was any question as to whether the gummed label would be secure.



APPENDIX C

QUALITY ASSURANCE AND QUALITY CONTROL PROCEDURES AND EVALUATION

All sampling information was recorded on the field sampling records. Written chain-of-custody procedures were followed whenever samples were collected, transferred, stored, analyzed, or destroyed. The objective of these procedures was to create an accurate written record that could be used to trace the possession and handling of the samples from the point of collection through analysis. A sample was determined to be in someone's "custody" under any of the following conditions:

- It was in one's actual possession;
- It was in one's view, after being in one's physical possession;
- It was placed and kept in a locked location after being in one's physical possession; and
- It was kept in a secured area that is restricted to authorized personnel only.

Each time sample custody changed hands, the chain-of-custody form indicated that change. All efforts were made to limit the number of people involved in the collection and handling of samples. The field sampler was responsible for the care and custody of the samples collected until they were transferred under the appropriate chain-of-custody procedures. Specific chain-of-custody procedures are described in the LEA SOP for *Quality Assurance/Quality Control Measures for Field Activities* included in Attachment C-1 of this document.

2.3.3 Field Documentation

Daily Field Reports and other project information tracking forms were used to record general field data collection activities or pertinent field observation or occurrences. These forms consist of the loose-leaf field documentation forms completed daily by field crews. Entries were made in waterproof ink and each page was consecutively numbered for each sampling day. Each daily entry included the following information:

- Name of person recording information;
- Names of all field personnel;
- Project name and number;
- Date;
- Start and end times;
- Weather conditions;



APPENDIX C

QUALITY ASSURANCE AND QUALITY CONTROL PROCEDURES AND EVALUATION

- Equipment used;
- Samples collected;
- Field parameters measured; and,
- Equipment calibration performed.

Other information that was recorded in the field logs included the level of personal protective equipment used, difficulties, accidents, incidents, equipment problems or malfunctions, or deviations from proposed scope of work.

Any corrections made in the field logs were crossed out, not erased, and initialed by the person making the correction. Each page of the logs was signed by the person responsible for recording information on that day. All lines on a page, and all pages, were used or crossed out and initialed.

This information was transmitted from field to office personnel at the end of each working day, or as soon thereafter as possible, for input into LEA's Information Management System (IMS). The Daily Field Reports and forms, in turn, were placed in the central project file.

2.3.4 Mapping

The location of each monitoring well was previously surveyed by a State of Connecticut licensed surveyor. All of the information used to locate sampling points within the Project Area was transferred to AutoCAD® drawings that served as the base maps for data presentation in this report.

2.4 Field Sampling Quality Assurance

QA samples were collected in general accordance with the LEA SOP for *QA/QC Measures for Field Activities*, included in Attachment C-1 of this document. The purpose of the QA samples is to confirm the reliability and validity of the field data gathered during the course of the groundwater monitoring activities. Field duplicate samples were used to provide a measurement of the consistency of samples collected from the same monitoring well and an estimate of variance and bias. Trip blank samples and equipment blank samples were used to provide a measurement of cross-contamination sources and decontamination efficiency, respectively, for groundwater sampling. Section 3 provides a discussion of the QA/QC sampling results.



APPENDIX C

QUALITY ASSURANCE AND QUALITY CONTROL PROCEDURES AND EVALUATION

2.5 Sample Shipping

Following sample collection, the filled sample containers were placed in coolers and packed appropriately to avoid bottle breakage. Either freezer packs or ice packed in re-sealable plastic bags or plastic containers were placed in the coolers to keep the samples at a temperature less than or equal to 4° Celsius during transport. At the end of each sampling day, samples were picked up by the analytical laboratory's courier service or brought back to LEA's Plainville, Connecticut, office and placed into LEA's External Laboratory Refrigerator for pick up the next day by the analytical laboratory's courier service.

2.5.1 Samples Submitted for Laboratory Analysis

Groundwater samples collected and submitted to the laboratory for analysis were appropriately labeled and logged on chain-of-custody forms. Copies of completed chain-of-custody records for samples submitted for analysis or archiving were submitted to the Project Manager at the end of each working day or as soon thereafter as possible.

2.5.2 Laboratory Analytical Results

The analytical results provided by the laboratory were provided in electronic data deliverable (EDD) format as well as .pdf format to the Project Manager. After documentation of receipt of the results, the EDD was entered into the electronic database by the Database Manager.

2.6 Database Management

The electronic analytical database was maintained in the LEA IMS in a dBASE® format. The database management functions are described in the following paragraphs.

2.6.1 Database Administration

Database administration included coordination of data entry and verification and review of data for completeness and correctness. The Database Manager interfaced with the Project Manager and field personnel to ensure that the database met the project objectives.

2.6.2 Electronic Data Entry

The EDD files provided by the analytical laboratory were uploaded to the electronic analytical database by the Database Manager. Data received from the laboratory in electronic format were



APPENDIX C

QUALITY ASSURANCE AND QUALITY CONTROL PROCEDURES AND EVALUATION

checked for completeness by comparing data received with data analyses requested in the chain-of-custody forms. Analytical data were verified to assure the accuracy of the EDD, as compared to the analytical laboratory reports. Data verification involved having a qualified person other than the Database Manager manually check a printout from the electronic database against the laboratory reports. Any deviations from the laboratory reports were reported to the Database Manager, and the subsequent changes re-checked to verify their accuracy. In addition, the sample identification number, location, constituent, and qualifier codes were also verified.

2.6.3 Archiving of Electronic Data

Archiving of the electronic project database was routinely accomplished. Data were backed up on a no-less-than weekly basis. The permanent archive for the analytical and geological/hydrological data is both electronic and hard copy files maintained by LEA.

2.6.4 Data Verification

The field personnel performed an initial review of data obtained from field measurements. This review consisted of checking procedures utilized in the field, ensuring that field measurement instruments were properly calibrated, verifying the accuracy of transcriptions, and comparing data obtained in the field to historic measurements. Field records were subsequently reviewed following completion of each day's field activities for completeness and consistency.

An internal review of analytical data was the responsibility of laboratory personnel. The analyst initiated the data review process by examining and accepting the data. The data reviewer then reviewed the completed data package. The data reviewer provided a technical review for accuracy and precision according to the methods employed and laboratory protocols. The data package was also reviewed for completeness (i.e., all pertinent information is included, all appropriate forms are signed and dated, calculations are correct, and holding times and quality control sample acceptance criteria have been met). A final review of the data was provided by the Project Manager to ensure that the data package met the project specifications.

2.7 Data Presentation

The objective of data presentation was to illustrate the analytical data for the Project Area in formats that facilitated data interpretation and visualization. These formats include tables, figures, and drawings, as appropriate.



APPENDIX C

QUALITY ASSURANCE AND QUALITY CONTROL PROCEDURES AND EVALUATION

2.7.1 Analytical Data Presentation

Use of the electronic database for storage and retrieval of a wide range of both sample collection and analytical information maximized the ease and accuracy of data review and presentation. Tables of analytical and sampling information were produced in multiple formats to assist in the data evaluation process. Examples of analytical data presentations incorporated in this report include: tabular listings of analyses conducted, sorted by location and sample identification number, and summaries of exceedances of tabulated numeric criteria in the CTDEP's Remediation Standard Regulations (RSRs).

2.7.2 Facility Drawings

Facility drawings were created using AutoCAD[®] software. Base maps were generated using available information provided by Pratt & Whitney.

2.8 File Organization

Files of original analytical data obtained during the groundwater monitoring events were maintained throughout data evaluation process and ultimately archived in a central file. Incoming data were logged into the project file both on the project analytical database and on hardcopy and then were appropriately placed in the file. Analytical results from the laboratories were keyed electronically to the sample identification numbers assigned during sample collection. Original field documentation forms, paper copies of laboratory reports, and other project files information were transferred from the project file to a designated archive location upon the completion of the project. Computerized data were stored in both hard copy and electronic back-up formats.



APPENDIX C

QUALITY ASSURANCE AND QUALITY CONTROL PROCEDURES AND EVALUATION

3. QUALITY ASSURANCE/QUALITY CONTROL SAMPLES

QA/QC samples collected during the 2009 Post-remediation Groundwater Monitoring Program included: duplicate groundwater samples; equipment blank samples; and trip blank samples. The duplicate samples and equipment blanks were analyzed for the same suite of constituents as the field samples, and trip blanks were analyzed for volatile organic compounds (VOCs) only.

3.1 Field Duplicate Samples

Field duplicate samples were collected to provide a measure of the reproducibility of field sampling and laboratory analytical methodologies. Duplicate samples were coded in a fashion that did not alert the laboratory to the fact that the samples are replicates. Consistency between analytical results for field duplicate samples indicates consistent field sampling, sample handling, and analytical laboratory procedures. The consistency between field duplicate pairs is often measured by calculating the relative percent difference (RPD) for detects in a field duplicate pair when a compound was reported at greater than two times the sample quantitation limit in both samples. Field duplicate precision were met when the RPD was less than or equal to 30 % for aqueous samples (which is based upon the United States Environmental Protection Agency (EPA) Region I Tier II Validation Guidance). If the RPD exceeded the acceptable limit, the affected compound(s) results were considered to be estimated values (no directional bias) and data usability was evaluated based on the project objectives. The RPD is calculated using the following formula:

$$RPD = \frac{|X_1 - X_2|}{(X_1 + X_2)/2} \times 100\%$$

where X_1 and X_2 represent the two reported concentration measurements.

One duplicate groundwater sample was collected during each quarterly monitoring event and was submitted for analysis for VOCs, extractable total petroleum hydrocarbons (ETPH), polychlorinated biphenyls (PCBs), Resource Conservation and Recovery Act (RCRA) 8 metals, copper, nickel and zinc. A summary of field duplicate data for groundwater samples is presented in Table C-1, and a summary of constituents detected in duplicate groundwater samples is presented in Table C-2



APPENDIX C

QUALITY ASSURANCE AND QUALITY CONTROL PROCEDURES AND EVALUATION

3.1.1 Volatile Organic Compounds

There were six instances in which compounds were reported at concentrations greater than two times the reporting limit. The RPDs for these sample pairs ranged from 0% to 7.4%, thus indicating that 100% of the RPDs with detections of at least two times the reporting limits met the acceptance criterion.

3.1.2 Extractable Total Petroleum Hydrocarbons

There were three instances in which compounds were reported at concentrations greater than two times the reporting limit. The RPDs for these sample pairs ranged from 3.66% to 9.48%, thus indicating that 100% of the RPDs with detections of at least two times the reporting limits met the acceptance criterion.

3.1.3 Polychlorinated Biphenyls

PCBs were not detected in any groundwater sample collected. Therefore, an RPD assessment could not be performed.

3.1.4 Metals

There were no instances in which metals were reported at concentrations greater than two times the reporting limit. Therefore, an RPD assessment could not be performed.

3.2 Equipment Blank Samples

Equipment blank samples are used to indicate if any cross-contamination of samples between uses of sampling equipment or contamination to samples from disposable equipment may have occurred. Field equipment blank samples are collected by pouring laboratory-provided water (analyte-free, de-ionized) through and/or over decontaminated or disposable sampling equipment into appropriate containers. The criteria for evaluating equipment blanks were such that no target compound should be present at or above the sample quantitation limit in any given equipment blank.

One equipment blank sample was collected during each quarterly monitoring event and submitted to the laboratory for analysis for VOCs, ETPH, PCBs, and metals. ETPH was reported at a concentration of 0.248 mg/l in the equipment blank collected on June 18, 2009, and at a concentration of 0.0840 mg/l in the equipment blank collected on September 18, 2009. It appears



APPENDIX C

QUALITY ASSURANCE AND QUALITY CONTROL PROCEDURES AND EVALUATION

that the concentrations of ETPH reported in groundwater collected from monitoring wells on the same dates as the contaminated equipment blank samples may be elevated. No additional constituents were detected in any of the equipment blank samples collected in 2009. A summary of all equipment blank samples analyzed is provided as Table C-3.

3.3 Trip Blank Samples

Trip blank samples are used to indicate if any cross-contamination between samples or contamination from other sources of VOCs may have occurred during transport, storage, or laboratory analysis of samples. Trip blanks were prepared by Accutest Laboratories (Accutest) using ultra-pure, de-ionized water and submitted to the sampling team whenever glassware was delivered. A trip blank accompanied all project VOC sample containers through all custody changes in possession, coolers and refrigerators. The trip blanks were never opened by the sampling team.

A total of four trip blank samples, one for each day that sampling was conducted, were submitted to Accutest for analysis. No constituents were reported above laboratory detection limits in any of the trip blank samples that were analyzed during the 2009 sampling events. A summary of all trip blank samples analyzed is provided as Table C-4.



APPENDIX C

QUALITY ASSURANCE AND QUALITY CONTROL PROCEDURES AND EVALUATION

4. ASSESSMENT OF LABORATORY QA/QC INFORMATION

All data were analyzed using the Connecticut Reasonable Confidence Protocols (RCPs), which are analytical methods based on the respective Environmental Protection Agency (EPA) methods. The RCPs provide specific requirements for QA/QC that the laboratory must follow during analysis of environmental samples. In addition, the RCP methods require the laboratory to report the QA/QC analytical data associated with the analysis of each sample in the laboratory report and further require that the laboratory provide a narrative of any non-conformances for QA/QC data that were outside the acceptable limits for such data, as described in the specific RCP method.

QA/QC information provided by laboratories was evaluated with respect to quality by conducting a DQA and DUE in accordance with the methodology described in the November 2007 guidance document entitled *Reasonable Confidence Protocols* and in more detail in the May 2009 document entitled *Laboratory Quality Assurance Quality Control, Data Quality Assessment, Data Usability Evaluation Guidance Document*. The DQA process is intended to assess the quality of the analytical data generated by the laboratories. The DUE is performed to determine, once the quality of the analytical is known, whether the quality of that data will affect its usability for the intended purpose.

4.1 Data Quality Assessment and Usability

The DQA was performed to assess the quality of the analytical data in each laboratory analytical report package. The DQA resulted in identifying data for which the quality could affect its potential use in decision-making. The DUE, which took into account the objectives for the data collection effort, and the intended use of the data, was performed using the information developed during the DQA. The RCP Data Quality Assessment Summary Reports that were generated during that assessment process are included as Attachment C-2.

Each analytical data package was reviewed in accordance with the DQA review process. Several deficiencies were noted. These included:

- Results for Laboratory Control Sample (LCS) for VOCs outside the accepted range of variability;
- Recoveries for Matrix Spike/Matrix Spike Duplicate (MS/MSD) for VOCs outside the accepted range of variability; and



APPENDIX C

QUALITY ASSURANCE AND QUALITY CONTROL PROCEDURES AND EVALUATION

- Recoveries for initial calibration curve and continuing calibration curve outside the accepted range of variability for specific VOC constituents.

After the laboratory analytical data were evaluated during the DQA, a DUE was performed. The DUE took into account the following:

- the site-specific conceptual site model (CSM);
- knowledge of the contaminant types, concentrations, and distribution;
- objectives for the data collection effort and the intended use of the data (i.e. the data quality objectives (DQOs)); and
- results from field QA/QC sampling.

In general, the QA/QC deficiencies identified related to constituents that are not identified as constituents of concern for the Project Area. Taking into consideration multiple lines of evidence, results from the DUE indicated that the data generated during the 2009 quarterly groundwater sampling events were usable for the intended purpose. Deficiencies that were deemed to have the potential to affect the interpretation of the data, and which, therefore required more detailed evaluation, included the following issues.

Low percent recoveries of 59% and 40% were reported for chloromethane and dichlorodifluoromethane, respectively, in the LCS run on June 18, 2009, indicating a low bias. A low percent recovery of 57% was also reported for dichlorodifluoromethane in the LCS run on December 7, 2009. Although these constituents were not reported above laboratory detection limits in the samples associated with the LCS, these constituents have not been historically identified in groundwater and are therefore not constituents of concern.

The sample collected from monitoring well HB-MW-50 on December 7, 2009 was selected by the laboratory for MS/MSD analysis. Although percent recoveries were reported below the acceptable QA/QC limits for multiple VOC constituents, these constituents have not been historically identified in groundwater and are therefore not constituents of concern.

The rationale discussed in the foregoing statements, coupled with the number and type of QA/QC issues identified during the DQA, provide support for a conclusion that analytical results for the samples collected during the four 2009 monitoring events were considered usable for decision-making purposes.



TABLES





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Legend: x - mass, t - TCLP, s - SPLP, e - EPTOX, z - ZHE, d - Thermal Desorption, r - Charcoal Tube, a - SEM/AVS, m - Methanol, nr - not received; Capitalized - at least one analyte in class detected

Page 1 of 1

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Page 1 of 1

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Page 1 of 1

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Page 1 of 1

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Page 1 of 1

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ATTACHMENT C-1

LEA Standard Operating Procedures



**Loureiro Engineering Associates, Inc.
Standard Operating Procedure
for
Liquid Sample Collection and Field Analysis**

**SOP ID: 10004
Date Initiated: 02/20/90
Revision No. 006: 12/31/01**

Approved By: <u>/s/ Joseph T. Trzaski</u>	<u>12/31/01</u>
Joseph T. Trzaski	Date
Senior Scientist	
<u>/s/ Nick D. Skoularikis</u>	<u>12/31/01</u>
Nick D. Skoularikis	Date
Director of Quality	

REVISION RECORD

<u>Rev #</u>	<u>Date</u>	<u>Additions/Deletions/Modifications</u>
Initial Issue	2/20/90	
001-004	NR	No record.
005	01/15/99	No record.
006	12/31/01	Updated to conform to new SOP format. Minor revisions throughout.



Loureiro Engineering Associates, Inc.
Standard Operating Procedure
for
Liquid Sample Collection and Field Analysis

1. Purpose and Scope

This document describes procedures to be followed for measurement of static water level elevations, detection of immiscible layers, well evacuation, sample withdrawal, and field analyses.

2. Definitions

2.1. Immiscible layers: The term is used to denote free-phase liquids that may be present in the aquifer as a result of a release. These liquids may have a density lighter than water (light non-aqueous phase liquids (LNAPL) or floaters) or heavier than water (dense non-aqueous phase liquids (DNAPL) or sinkers).

3. Equipment

3.1. Equipment required for the collection and field analysis of liquid samples includes:

- Water-level indicator (accurate to 0.01 foot). The size of the instrument depends on the size of the wells being monitored.
- Distilled water.
- Hand towels.
- Portable volatile organic compound (VOC) analyzer (Photovac MicroTIP[®], Foxboro OVA[®] or equivalent).
- Interface probe, clear polyvinyl chloride (PVC) or fluorocarbon resin bailer (if required).
- pH and temperature meter (capable of accuracy to 0.1 pH unit).
- Specific conductivity meter.
- Bailers (clean or disposable) with disposable nylon or polyethylene rope.



- Polyethylene plastic sheeting.
- Polyethylene tubing, and appropriate pumping apparatus such as centrifugal pump, Wattera[®] pump with fluorocarbon resin foot valve, peristaltic pump with appropriate tubing, submersible pump or other appropriate pumping apparatus.
- Clean disposable gloves.
- Field paperwork.
- Sample collection jars.
- Indelible marker.
- Cooler(s) with ice or ice packs.
- Site-specific Health and Safety Plan (as applicable).
- Site-specific work plan, work instructions, drawings (as applicable).
- Personal protective equipment (as may be required by Site Specific Health and Safety Plan).
- Aluminum foil (if field decontamination is expected).
- Appropriate containers for collection of purge water (bucket, carboy, 55-gallon drum etc.).

4. Procedures

Immediately upon opening the well, the air in the wellhead should be sampled for VOCs using a portable VOC analyzer, such as a Photovac MicroTIP[®]. The well cap shall be opened slightly and the sampling port of the VOC analyzer shall be inserted into the well. The maximum reading shall be recorded on the appropriate field paperwork. The instrument shall be zeroed with ambient air prior to the measurement, and the initial and final readings shall be recorded for each well.

Measures shall be taken during well sampling to prevent surface soils from coming in contact with the purging equipment and lines. Typically, a polyethylene sheet is placed on the ground providing adequate coverage for the equipment being used.

4.1. Detection of Immiscible Layers

- 4.1.1. If the presence of immiscible layers is suspected or unknown, the sampling event shall include provisions for detection of immiscible phases prior to well evacuation or sample collection. Lighter and/or



denser immiscible phases may be encountered in a groundwater monitoring well.

- 4.1.2. An interface probe will be used to determine the existence of any immiscible layers, light or dense. Alternatively, a clear fluorocarbon resin or PVC bailer may be used to determine the existence of the phases or oil sheen in the well when no accurate determination of the immiscible layer thickness is required. For Geoprobe[®] wells smaller than 1" in diameter, an interface probe cannot be introduced into the well. A small diameter disposable bailer can be used to determine the existence of any immiscible layers. Alternatively the initial water purged from a well will be collected and evaluated visually for the presence of immiscible layers.
- 4.1.3. If immiscible layers were encountered, the levels of the immiscible liquids shall be measured to an accuracy of 0.02 feet using an electronic interface probe capable of detecting the interfaces between air, product, and water. The interface levels shall be recorded in the field notebook. Adjustments of the observed head to the theoretical hydraulic head shall be calculated based on the density conversion factor associated with the particular non-aqueous phase liquid.
- 4.1.4. If required, the immiscible layers and groundwater shall then be purged into 55-gallon 17H DOT drum, which shall be labeled and characterized for disposal. The immiscible layer shall be collected prior to any purging activities.

4.2. Measurement of Static Water Level

- 4.2.1. The static water elevations in each well shall be measured prior to each sampling event. This is performed initially to characterize the site, and in subsequent sampling rounds to determine whether horizontal or vertical flow gradients have changed. A change in hydrologic conditions may necessitate modification of the groundwater monitoring program.
- 4.2.2. Remove the protective cover and locking cap.
- 4.2.3. Each well shall have a surveyed reference point located at the top of the well casing with the locking cap removed. The reference point shall be easily recognizable, since the personnel conducting the sampling may differ from one sampling event to the next. If no distinguishable reference point is present, the measurements shall be



taken from the highest point on the well casing. The absence of a reference point and subsequent reference point used for the measurements shall be recorded on the field paperwork.

4.2.4. The following parameters shall be measured with an accuracy of 0.01 ft:

- Depth to standing water.
- Depth to bottom of well.

4.2.5. A water-level indicator will be used for measurement. Due to possible pressure differences between the well atmosphere and the ambient atmosphere, the water level will be allowed to equilibrate for 15 minutes following removal of the well cap. The results shall be recorded in the appropriate location(s) on the appropriate field forms.

4.2.6. Total depth measurements will be compared to original depths to determine the degree of siltation that may have occurred. This information shall be noted on the field form. Should significant siltation occur in any well, the well may need to be redeveloped by an approved method. This information will also be used to confirm that the proper well is being sampled (in case of cluster wells).

4.2.7. The portion of the tape immersed in the well shall be decontaminated during retrieval using a distilled water rinse followed by drying with a clean wipe, prior to use in another well. This decontamination procedure shall be amended, as needed, to accommodate the specific type of contamination anticipated.

4.3. Field Analysis

4.3.1. Parameters that are physically or chemically unstable shall be measured immediately after collection using a field test meter or other equipment. Parameters such as pH, temperature, specific conductivity, and turbidity will be measured in the field, at the temperature of the well sample. The measurement of additional parameters may be required dependent upon sampling methods or other site-specific conditions.

4.3.2. A combination of pH/temperature/specific conductivity meters shall be used. The meter shall be calibrated prior to use and at the end of the day using calibration solutions, in accordance with the instructions provided in the instrument's operating manual. Whenever a



questionable reading (“spike”) is observed the calibration shall be checked. The calibration shall be checked prior to sampling each well or well cluster. Calibration information to be recorded in the field paperwork shall include the temperature, pH, and conductivity readings in each calibration solution before and after each calibration.

The pH/temperature/conductivity meters shall be placed into a sample and allowed to stabilize for a minimum of twenty seconds. The accuracy of measurement shall be 0.1 standard units for pH, and 0.1E Celsius for temperature. For conductivity, the accuracy shall be as stipulated by the range of the instrument. The sample shall be discarded in an appropriate manner upon completion of the analysis.

- 4.3.3. The pH/temperature/specific conductivity meters shall be decontaminated using a distilled/deionized water rinse between each sample. To the extent possible, the same probe and meter shall be used for all measurements at a given site for the duration of monitoring at the site.
- 4.3.4. Turbidity of the sample will be measured using a DRT turbidimeter, Model 15C or equivalent, that has been calibrated in accordance with the instructions provided in the instrument’s manual. The accuracy of the measurement shall be to 1 NTU (nephelometric turbidity unit).

4.4. Well Evacuation

- 4.4.1. Calculate standing water in the well based on the following schedule and record on the appropriate field form:

Well Diameter (inches)	Conversion Factor (gal/feet)
½	0.01
1	0.041
1 ¼	0.064
1 ½	0.091
2	0.163
4	0.654
6	1.47

- 4.4.2. Generally, a centrifugal, submersible, air-lift, bladder, inertial, or peristaltic pump equipped with a fluorocarbon resin or PVC foot valve on the end of dedicated tubing, as appropriate, may be used to evacuate the monitoring wells. Alternatively, evacuation of the wells may be accomplished using a bailer.



- 4.4.3. A new sheet of polyethylene plastic shall be placed on the ground adjacent to the well. Sampling and purging equipment, such as pump, tubing, bailers and bailer twine, containers, etc., shall be placed on the polyethylene sheet, never on the ground.
- 4.4.4. Don disposable gloves, prepare pump and tubing for insertion into the well, ensuring that any tubing or pump apparatus is of sufficient length to reach the appropriate depth for pumping. Pumping shall occur within the well screened interval as indicated on the well construction diagram. If the well construction information is not available, the bottom of the tubing or pump shall be placed 1' - 2' above the bottom of the well.
- 4.4.5. Lower the pump and/or tubing gently into the water column to the appropriate depth and begin pumping.
- 4.4.6. Measure pH, temperature, specific conductivity, turbidity and other specific parameters in the well from the first water extracted during the purging process.
- 4.4.7. Remove a volume of water equal to 3 to 5 times the standing water from the well measured into an appropriate container. Purging of the well shall occur at a slow rate to minimize agitation of the water recharging the well.
- 4.4.8. If it is not possible to remove three volumes as described above, due to slow recovery of the well, the well shall be emptied and allowed to recover. In slow-yielding wells, whenever full recovery exceeds two hours, the sample shall be extracted as soon as a sufficient volume is available for a sample for each parameter.
- 4.4.9. Measure pH, temperature, specific conductivity, turbidity and other specific parameters **prior** to sampling.
- 4.4.10. Well evacuation is deemed to be complete when the following criteria have been met:
- pH measurements vary no more than ± 0.5 standard units.
 - Specific conductivity measurements vary no more than $\pm 10\%$.
 - Temperature measurements vary no more than ± 1 EC.
 - Turbidity measurements (if used) are below 5 NTU, if practicable.



Alternatively well purging shall be deemed complete if a maximum of five well volumes have been removed from the well and/or other site-specific or method-specific parameters have stabilized.

- 4.4.11. Measure pH, temperature, specific conductivity and turbidity (and other specific parameters) again **after** sampling to determine the effectiveness of purging and sample stability.
- 4.4.12. Do **not** re-use purging equipment (bailers, rope, tubing, sampling vials, etc.). Any non-disposable bailers shall be returned to the office for decontamination. Pumps shall be decontaminated between monitoring wells, in accordance with procedures noted in Section 4.7.
- 4.4.13. Bailer twine and other consumables, such as filter apparatus, shall be disposed of appropriately.
- 4.4.14. Record sampler's name, sampling time, volume of water purged, parameters measured, weather conditions, sample number, analyses required and all other pertinent information on appropriate field forms, and complete the chain of custody form. The field paperwork shall also provide an indication of other field conditions that could potentially impact water levels (such as a pond being drained, or presence of a beaver dam in nearby surface water).
- 4.4.15. As dictated by project-specific requirements and/or groundwater quality considerations, any water purged from the monitoring wells shall be stored in properly labeled containers for disposal.
- 4.4.16. Storage shall be in properly labeled containers approved for storage of hazardous materials, and in an appropriate designated location at the site.

4.5. Sample Withdrawal

- 4.5.1. In order to ensure that the groundwater sample is representative of the formation, it is important to minimize physical alteration (i.e. agitation during purging and/or sample collection) or chemical contamination of the sample during the withdrawal process. The sample set shall include enough dedicated bailers and sample jars to obtain samples from each well, and additional quality assurance/quality control (QA/QC) samples such as duplicates, trip blanks and equipment blanks. In addition, it is recommended to increase the supply of



sampling equipment and sample jars by about 10% to account for missing or broken glassware.

4.5.2. Use either an appropriate pump or bailer to purge each well (the same pump used for purging may be used for sample withdrawal, with the exception that samples intended for VOC analysis must be collected using either a bailer or a bladder pump.). Do not reuse a bailer in the field; used non-disposable bailers shall be returned to the office for decontamination.

4.5.3. To minimize agitation of the water column, samples shall be collected from the pump tubing in the following order into pre-labeled sample containers:

- Extractable organics (semi-volatile).
- Total petroleum hydrocarbons (TPH).
- Poly chlorinated biphenyls (PCBs).
- Metals.
- Phenols.
- Cyanide.
- Chloride and sulfate.
- Nitrate and ammonia.
- Turbidity.
- Radionuclides.

Samples to be analyzed for the following constituents shall be collected using a bailer, after any pump and tubing have been removed from the well. Removal of any down hole equipment shall be done carefully and in a manner that minimizes disturbance of the water column.

- Volatile organic compounds (VOCs).
- Purgeable organic carbon (POCs).
- Purgeable organic halogens (POX).
- Total organic halogens (TOX).
- Total organic carbon (TOC).



- 4.5.4. Samples shall be obtained from the monitoring wells as soon as possible after purging. This may require waiting an extended period for low-yielding wells.
- 4.5.5. Samples collected for VOC analysis shall be free of any air bubbles and inverted upon filling. Bacterial samples shall be collected using dedicated gloves; taking care not to allow anything to touch the inside of the sampling container.
- 4.5.6. Samples collected for dissolved metals analysis, which are to be filtered in the field, shall be passed through a 0.45 micron (maximum) filter (either in-line or under negative pressure) prior to placement in the sample bottle.
- 4.5.7. In situations where replicate samples shall be required, care shall be taken to ensure that each sample collected is independent.
- 4.5.8. In some situations, inorganic parameters may be sampled directly from a pump after completion of well evacuation procedures.

4.6. Post Sampling Procedures

- 4.6.1. As required, upon completion of all sampling procedures for a particular site, secure the lid of the cooler using packaging tape with the chain of custody inside.
- 4.6.2. If the laboratory is local, transport the samples directly to the laboratory and present them to the sample manager. The representative of LEA should witness the verification of the chain of custody and obtain a carbon copy for filing in the project notebook.
- 4.6.3. If the laboratory is distant, arrange for transport with a reputable carrier service. Typically, the laboratory specifies the carrier to be used and provides the shipping papers. The cooler and samples shall be secured for transport, and all mailing documentation secured onto the top of the cooler. Unless otherwise specified, delivery shall be overnight. Friday shipments should be mailed for Saturday delivery, once confirmed that the laboratory can accept them on Saturday. The laboratory shall provide confirmation of acceptance noting the temperature of the temperature blank and any deviations from the chain of custody.



4.7. Field Documentation

4.7.1. Field documentation shall include at a minimum: a chain-of-custody form, Field Data Record Groundwater Form, Sample Collection Form, Daily Field Report, Field Quality Review Checklist. Sample labels shall be used for proper sample identification.

4.7.1.1. The labels shall be sufficiently durable to withstand immersion for 48 hours without detaching and to withstand normal handling. The information provided shall be legible at all times.

4.7.1.2. The following information shall be provided on the sample label using an indelible-ink pen:

- Sample identification number.
- LEA Commission Number.
- Date and time of collection.
- Place of collection.
- Parameter(s) requested (if space permits).

4.7.1.3. A field logbook and/or appropriate field forms will be used to log all pertinent information with an indelible-ink pen. The following information shall be provided:

- Project and site identification.
- LEA commission number.
- Identification of well.
- Static water level measurement technique.
- Presence of immiscible layers and detection method.
- Time well purged.
- Collection method for immiscible layers and sample identification numbers.
- Well evacuation procedure/equipment.
- Sample withdrawal procedure/equipment.
- Date and time of collection.



- Types of sample containers used and sample identification numbers.
- Preservative(s) used.
- Parameters requested for analysis.
- Field analysis method(s).
- Whether or not field filtration was performed and the filter size, if appropriate.
- Field observations on day of sampling event.
- Record of site activities.
- Field personnel.
- Climatic conditions, including air temperature.
- Status of total production.
- Record of non-productive time.
- Name of all visitors to the site related to the project.

4.7.1.4. The chain-of-custody record shall include the following information:

- Company's name and location.
- Date and time of collection.
- Sample number.
- Container type, number, size.
- Preservative used.
- Signature of collector.
- Signatures of persons involved in the chain of possession.
- Analyses to be performed.
- Type and number of samples.

A separate entry shall be made for each sample, and within each sample each case that a different preservative is used.



4.7.1.5. The Field Data Record Groundwater Form shall be updated during the sampling of each well and include the following information:

- Identification of well.
- Well depth, diameter, depth to water.
- Static water level depth and measurement technique.
- Purge volume and pumping rate.
- Time well purged.
- LEA commission number.
- Date.

4.8. Equipment Decontamination

All materials and equipment, which enter a well, must be clean and free of any potential contaminants. In general, the equipment and materials entering the well shall be unused and preferably disposable. Any items not considered disposable should be decontaminated prior to commencing field activities. If field decontamination is required, the choice of decontamination procedures shall be based upon knowledge of the site-specific contaminants and as outlined in the site-specific work plan.

For sites at which the contaminants are unknown, but contamination is suspected, the decontamination procedures outlined below shall be followed.

- 4.8.1. Prior to commencing any field activities, the following solutions (as appropriate for the appropriate contaminants) shall be prepared and placed into 500-ml laboratory squirt bottles: 10% methanol in water; 10% nitric acid in water; 100% n-hexane; distilled, de-ionized water.
- 4.8.2. In the field, prepare approximately 2.5 gallons of a solution of Alconox[®] (or other suitable non-phosphate laboratory grade detergent) in tap water in a 5-gallon bucket.
- 4.8.3. Prepare a piece of 5-mil polyethylene sheeting to underlie the decontamination area. The sheeting shall be of sufficient size to contain any accidental discharge of decontamination solutions. The plastic shall be bermed to contain spills.
- 4.8.4. The order for decontaminating equipment is as follows:



- 1) Detergent scrub.
 - 2) DI water rinse.
 - 3) Hexane rinse (to be used only if separate-phase petroleum product, other than gasoline, is present).
 - 4) DI water rinse.
 - 5) 10% nitric acid rinse (to be used only when metals are suspected as potential contaminants).
 - 6) DI water rinse.
 - 7) Methanol rinse (<10% solution).
 - 8) Air dry.
- 4.8.5. Materials considered disposable such as the bailer cord, pump tubing, filters, etc. shall not be decontaminated and shall be disposed of in accordance with all applicable municipal, state, and federal regulations.
- 4.8.6. Wrap each piece of decontaminated equipment in aluminum foil, as appropriate, to maintain cleanliness.
- 4.8.7. At the end of the project day, dispose of all spent decontamination fluids and materials such as the polyethylene sheeting and personal protective equipment in accordance with all applicable municipal, state, and federal regulations.

5. Quality Assurance/Quality Control

Typically samples taken for Quality Assurance/Quality Control for liquid sample collection include duplicate samples, equipment blanks and trip blanks. The necessity for these samples will be outlined in the site-specific work plan. In general, all QA/QC measures taken during liquid sample collection shall be in conformance with LEA's standard operating procedure (SOP) ID 10005. Standard QA/QC measure shall include the recording of pertinent information as follows:

- 5.1. The Field Instrument & Quality Assurance Record, which is a portion of the Daily Field Report, shall include the following information:
- Instrument make, model, and type.
 - Calibration readings.
 - Calibration/filtration lot numbers.
 - Field personnel and signature.



5.2. The Field Quality Review Checklist, which is a portion of the Daily Field Report, shall assure the completeness of the sampling round and include the following information:

- Reviewer's name and date.
- Review of all necessary site activities and field forms.
- Statement of corrective actions for deficiencies.

6. References

- 6.1. EPA, *RCRA Groundwater Monitoring Technical Enforcement Guidance Document*, OSWER 9950.1, September 1986.
- 6.2. EPA, *Practical Guide for Groundwater Sampling*, EPA/600/2-85/104, September 1985.
- 6.3. DEP, *Site Characterization Guidance Document*, Draft, June 12, 2000.

END OF DOCUMENT



Loureiro Engineering Associates, Inc.
Standard Operating Procedure
for
Low Flow (Low Stress)
Liquid Sample Collection and Field Analysis

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REVISION RECORD

<u>Rev #</u>	<u>Date</u>	<u>Additions/Deletions/Modifications</u>
Initial Issue	06/11/01	
001	04/01/02	Updated to reflect new SOP format.
002	12/02/02	Updated to reflect stabilization procedures.
003	04/01/05	Incorporated modified low-flow sampling procedure to include the use of a peristaltic pump.



Loureiro Engineering Associates, Inc.
Standard Operating Procedure
For
Low Flow (Low Stress)
Liquid Sample Collection and Field Analysis

1. Purpose and Scope

This standard operating procedure (SOP) describes the procedures to be followed for measurement of static water level elevations, detection of immiscible layers, well evacuation, sample withdrawal, and field analyses utilizing low flow sampling techniques.

2. Definitions

2.1. Immiscible layers: The term is used to denote free-phase liquids that may be present in the aquifer as a result of a release. These liquids may have a density lighter than water (light non-aqueous phase liquids (LNAPL) or floaters) or heavier than water (dense non-aqueous phase liquids (DNAPL) or sinkers).

3. Equipment

3.1. Equipment required for the collection and field analysis of liquid samples shall include:

- Water-level indicator (accurate to 0.01 foot).
- Distilled water.
- Hand towels.
- Portable volatile organic compound (VOC) analyzer (Photovac MicroTIP[®], Foxboro OVA[®] or equivalent).
- Interface probe/clear view bailer (to check for light non-aqueous phase liquids only).
- Flow-through cell capable of monitoring pH, temperature, specific-conductance, oxidation reduction potential (Eh), dissolved oxygen (DO), and turbidity.
- Polyethylene plastic sheeting.



- Adjustable rate submersible pump (preferred), adjustable rate centrifugal pump, bladder pump (constructed of stainless steel or Teflon[®]), or adjustable rate peristaltic pump
- Appropriate tubing for the pump used, for instance polyethylene tubing (1/4 to 3/8 inch outer diameter (O.D.)) for the peristaltic pump
- Clean disposable gloves.
- Alconox[®], or other non-phosphate laboratory grade detergent.
- Three 5-gallon buckets.
- Decontamination brushes.
- Distilled, de-ionized (DI) water.
- Decontamination fluids (less than 10 percent methanol in water, 100 percent n-hexane, and 10 percent nitric acid).

4. Procedure

4.1. Health & Safety Requirements

All health and safety requirements described in the site specific Health & Safety Plan and/or Job Hazard analysis shall be observed

4.2. Equipment Decontamination

All materials and equipment that enter a well must be clean and free of any potential contaminants. Do not use any contaminated equipment or materials which are not designed to be used for groundwater monitoring, even if this means that the sampling will not be performed as planned.

In general, the choice of decontamination procedures should be based upon knowledge of the site-specific contaminants and outlined in the site-specific work plan.

For sites at which the contaminants are unknown, but contamination is suspected, the decontamination procedures outlined below should be followed.

- 4.2.1. Prior to commencing any field activities, the following solutions (as appropriate for the appropriate contaminants) should be prepared and placed into 500-ml laboratory squirt bottles: less than 10 percent



methanol in water; 10 percent nitric acid in water; 100 percent n-hexane; distilled, de-ionized water.

- 4.2.2. In the field, prepare approximately 2.5 gallons of a solution of Alconox[®] (or other suitable non-phosphate laboratory grade detergent) in tap water in a 5-gallon bucket.
- 4.2.3. Prepare a piece of 5-mil polyethylene sheeting to underlie the decontamination area. The sheeting should be of sufficient size to contain any accidental discharge of decontamination solutions. The plastic should be bermed to contain spills.
- 4.2.4. The order for decontaminating equipment is as follows:
 - 1) Detergent scrub.
 - 2) DI water rinse.
 - 3) Hexane rinse (to be used only if separate-phase petroleum product, other than gasoline, is present).
 - 4) DI water rinse.
 - 5) 10 percent nitric acid rinse (to be used only when metals are suspected as potential contaminants).
 - 6) DI water rinse.
 - 7) Methanol rinse (less than 10 percent solution).
 - 8) Air dry.
- 4.2.5. Materials such as the bailer cord should not be decontaminated and should just be disposed of after each test. Note: Bailers should be used **only** to check for LNAPL before sample collection using low-flow/low stress procedures. A bailer may be used to check for DNAPL **only after** all sample collection equipment has been removed from the well.
- 4.2.6. Wrap each piece of decontaminated equipment in aluminum foil, as appropriate, to maintain cleanliness.
- 4.2.7. At the end of the project day, dispose of all spent decontamination fluids and materials such as the polyethylene sheeting and personal protective equipment in accordance with all applicable municipal, state, and federal regulations.

4.3. Sample Collection

- 4.3.1. Immediately upon opening the well, the air in the well head will be sampled for VOCs using a portable VOC analyzer, such as a Photovac



MicroTIP® or equivalent. The instrument shall be zeroed with ambient air prior to the measurement, and the highest reading observed shall be recorded for each well. Measurements should be taken until stabilization of the readings has occurred.

4.4. Detection of Immiscible Layers

- 4.4.1. Should evidence warrant, a sampling event shall include provisions for the detection of immiscible phases prior to well evacuation or sample collection. LNAPLs are relatively insoluble liquid organic compounds with densities less than that of water (1 g/ml), while DNAPLs are organic compounds with densities greater than that of water. Lighter and/or denser immiscible phases may be encountered in a groundwater monitoring well.
- 4.4.2. An interface probe will be used to determine the existence of any immiscible layers, light or dense. Alternatively, a clear fluorocarbon resin or PVC bailer may be used to determine the existence of the phases or oil sheen in the well when no accurate determination of the immiscible layer thickness is required. As noted above, efforts to detect LNAPL only can be performed prior to sample collection. Efforts to detect DNAPL can be performed only AFTER sample collection has occurred.
- 4.4.3. Should elevations of the immiscible layers be required, levels of the fluids shall be measured to an accuracy of 0.01 feet using an electronic interface probe capable of detecting the interfaces between air, product, and water. The interface levels shall be recorded in the field form. Adjustments of the observed head to the theoretical hydraulic head shall be calculated based on the density conversion factor associated with the particular non-aqueous phase liquid.
- 4.4.4. If LNAPL is detected in a well, collection of a groundwater sample from that well is not recommended unless otherwise specified in the site-specific work plan or work instruction. However, if a groundwater sample must be collected from that well, low-flow sampling is the recommended technique, although care must be taken to minimize mobilization of the LNAPL into the zone from which the sample will be collected.

4.5. Measurement of Static Water Level



- 4.5.1. The static water elevations in each well shall be measured prior to each sampling event. This is performed initially to characterize the site, and in subsequent sampling rounds to determine whether horizontal or vertical flow gradients have changed. A change in hydrologic conditions may necessitate modification of the groundwater monitoring program.
- 4.5.2. Remove the protective cover and locking cap from the well.
- 4.5.3. Each well shall have a surveyed reference point located at the top of the well casing with the locking cap removed. The reference point shall be easily recognizable, since the personnel conducting the sampling may differ from one sampling event to the next.
- 4.5.4. The following parameters shall be measured with an accuracy of 0.01 ft:
 - Depth to standing water.
 - Depth to bottom of well.
- 4.5.5. A water-level indicator with a fiberglass tape will be used for measurement. As a result of possible pressure differences between the well atmosphere and the ambient atmosphere, the water level will be allowed fifteen minutes to equilibrate upon removal of the well cap. If excess pressure is encountered the water level will be allowed greater than fifteen minutes to equilibrate upon removal of the well cap. The results shall be recorded on the appropriate field form(s).
- 4.5.6. Total depth measurements will be compared to original depths to determine the degree of siltation that may have occurred. This information shall be noted on the field forms. Should significant siltation occur in any well, the well shall be redeveloped by an approved method.
- 4.5.7. The portion of the tape immersed in the well shall be decontaminated during retrieval using a distilled water rinse followed by drying with a clean wipe, prior to use in another well. This decontamination procedure shall be amended, as needed, to accommodate the specific type of contamination anticipated.
- 4.5.8. The static water level should be monitored and recorded throughout the purging and sampling of each well.



4.6. Field Analysis

- 4.6.1. Parameters that are physically or chemically unstable shall be tested utilizing a flow-through cell. Such parameters as pH, temperature, specific conductance, DO, Eh, and turbidity will be measured in the field at the temperature of the well sample.
- 4.6.2. Parameters such as pH, temperature, specific conductance, DO, and Eh shall be measured using a flow-through-cell (YSI model 6820 or equivalent). The meter shall be calibrated prior to use and at the end of the day using supplied solutions in accordance with the instructions provided by the manufacturer. Calibration information will be recorded in the field before and after each calibration.
- 4.5.3 Turbidity can be measured with a separate turbidimeter, although some flow-through cells include a turbidimeter. It is useful to have a separate turbidimeter on hand to check the validity of the turbidity values obtained using the flow-through cell if there is difficulty reaching low turbidity values or if the turbidity readings recorded do not seem to be consistent with visual observation of the water samples. All samples, including turbidity samples and samples to be submitted for analysis, must be collected before the groundwater passes through the flow-through cell to prevent cross-contamination by potentially stagnant fluid within the flow-through cell. This can be accomplished by using a bypass assembly or disconnecting the tubing from the flow-cell inlet prior to sampling.

4.7. Well Evacuation

- 4.7.1. Calculate standing water in the well based on the following schedule and record on the appropriate field form:

Well Diameter (inches)	Conversion Factor (gal/feet)
2	0.163
4	0.654
6	1.47

- 4.7.2. Generally, a submersible, air-lift, bladder, or peristaltic pump equipped with appropriate tubing of inert materials (such as polyethylene), shall be used to evacuate the monitoring wells.



- 4.7.3. A new piece of polyethylene plastic shall be placed on the ground adjacent to the well. Sampling and purging equipment such as the pump, tubing, containers, etc., shall be placed on the polyethylene sheet, never on the ground.
- 4.7.4. The pumps and tubing shall be prepared for insertion into the well while wearing disposable gloves. Make sure that any tubing or pump apparatus is of sufficient length to reach the appropriate depth for pumping.
- 4.7.5. Lower the pump and/or tubing gently into the water column to the midpoint of the saturated portion of the screened interval, unless otherwise specified. A site-specific sampling plan should specify the sampling depth, or provide specific criteria for the selection of intake depth for each well. If possible keep the pump intake two feet above the bottom of the well. Start the pump at the lowest speed setting and slowly increase the speed until discharge occurs. The initial pumping rate shall be approximately 0.1 liters per minute, however, the pumping rate shall not exceed 0.25 liters per minute. Measure the water level to ensure that drawdown in excess of 0.3 feet does not occur in the well. Adjust the pumping rate as necessary until little or no drawdown occurs. If the drawdown exceeds 0.3 feet, reduce pumping rate if possible. If drawdown still does not stabilize at a depth above the pump intake, shut the pump down and allow the well to recharge. It should be noted that stable drawdowns of 0.3 feet are desirable but not mandatory. Stabilization of the drawdown to a depth greater than 0.3 feet is acceptable as long as the depth at which stabilization occurs is above the pump intake. However, it is important that the stabilization depth is clearly recorded and maintained.
- 4.7.6. Monitor and record the water level and pumping rate at a minimum of every five minutes during purging. Calculate the volume of the discharge tubing, bladder pump (if used), and the flow-through cell. Monitor and record indicator field parameters (turbidity, pH, Eh, DO, temperature and specific conductance) in the well from the first water extracted during the purging process and at least every five minutes thereafter. Stabilization is considered to be achieved when three consecutive readings are within the following limits and no increasing or decreasing trend in the data can be observed:



- Turbidity (10% for values less than 5 and greater than 1 NTU). It should be noted that achievements of turbidity levels less than 5 NTUs are not mandatory but efforts should be made to collect a groundwater samples with the lowest turbidity achievable.
- DO (10%, measured as milligrams per liter).
- Specific Conductance and Temperature (3%).
- pH (+/- 0.1 unit).
- ORP/Eh (+/- 10 millivolts).

- 4.7.7. If after 2.5 hours of purging or the purging of three well volumes, (whichever comes first) the field parameters have not stabilized, purging may be discontinued to allow sample collection. Similarly, if it is not possible to obtain stabilization as described above as a result of slow recovery of the well, the well shall be evacuated and allowed to recover, at which point the samples should be collected immediately. The appropriate sampling forms shall include a notation that sample collection occurred without stabilization. Samples obtained from slow-yielding wells shall be collected as soon as a sufficient volume is available for a sample for each parameter.
- 4.7.8. Do **not** re-use purging equipment. Pumps shall be decontaminated between monitoring wells, in accordance with procedures noted in Section 4.1.
- 4.7.9. Record sampler's name, sampling time, volume of water purged, parameters measured, weather conditions, sample number, analyses required and all other pertinent information in the field notebook and/or appropriate field forms, and complete the chain of custody form.
- 4.7.10. Any water purged from the monitoring wells shall be stored in appropriate containers until the laboratory analyses are available. Then it should be disposed of in accordance with all applicable local, state and federal requirements.
- 4.7.11. Storage shall be in containers approved for storage of hazardous materials, and in an appropriate designated location at the facility.



4.8. Sample Withdrawal

- 4.8.1. In order to ensure that the groundwater sample is representative of the formation, it is important to minimize physical alteration (i.e. agitation during purging and/or sample collection) or chemical contamination of the sample during the withdrawal process.
- 4.8.2. Use an appropriate pump to purge each well; the same pump used for purging shall be used for sample withdrawal.
- 4.8.3. The samples shall be collected at a location before entering the flow-through cell. To minimize the effects of water column agitation on sample quality, samples shall be collected from the pump tubing in the following order into pre-labeled sample containers:
- VOCs.
 - Total petroleum hydrocarbons.
 - Extractable organics (semivolatiles).
 - PCBs.
 - Metals.
 - Phenols.
 - Cyanide.
 - Chloride and sulfate.
 - Nitrate and ammonia.
 - Turbidity.
 - Radionuclides.
 - Purgeable organic carbon (POCs).
 - Purgeable organic halogens (POX).
 - Total organic halogens (TOX).
 - Total organic carbon (TOC).
- 4.8.4. Samples shall be obtained from the monitoring wells as soon as possible after purging. This may require waiting an extended period for low-yielding wells.



- 4.8.5. Samples collected for VOC analysis shall be free of any air bubbles and inverted upon filling. Bacterial samples shall be collected using dedicated gloves; taking care not to allow anything to touch the inside of the sampling container.
- 4.8.6. Samples collected for metals analysis, which are to be filtered in the field, shall be passed through an appropriately sized filter prior to placement in the sample bottle. Pre-rinse the filter with approximately 25 to 50 milliliters of groundwater prior to collecting the filtered metals sample. Filter sizes will generally be either 0.45 microns for dissolved metals and 10 microns for metals that could be present as colloids or adsorbed onto colloids that could be mobile in the aquifer. The appropriate filter size for the individual project must be provided in site-specific work instructions.

4.9. "What If" Scenarios

- 4.9.1. Certain field conditions may be encountered that influence the choice of equipment to be used or altogether limit the feasibility of low-flow sampling techniques. The following is a brief description of select scenarios to provide field personnel with a guideline if similar circumstances are encountered

4.9.2. Turbidity

- 4.9.2.1. If turbidity measurements do not stabilize as described above after 2.5 hours of purging or the evacuation of three well volumes, whichever comes first, sample collection can be initiated. Record observations of the color, clarity, and other observable characteristics of the groundwater (such as the presence or absence of particles) in the field paperwork
- 4.9.2.2. If samples are being collected for analysis for total (unfiltered) metals and the turbidity has not stabilized below 10 NTU, a sample for additional analysis for metals should also be collected after being filtered in the field through an in-line 10-micron filter, if specified in the work instructions.

4.9.3. Peristaltic Pump



- 4.9.3.1. Difficulty may be encountered while advancing the flexible polyethylene peristaltic pump tubing to the desired depth within a deep well or older well. Excessive friction may result from the tubing contacting the sidewall of the well casing or accumulations of material on the well casing (i.e. mineral and bacterial deposits). In these scenarios, the tubing may coil within the well during advancement and prevent the desired depth from being attained. Efforts to weight the tubing should be attempted before using alternate pumping techniques.
- 4.9.3.2. If such well conditions are expected, a bladder pump or similarly submersible pump should be used instead of a peristaltic pump. A bladder pump provides sufficient mass on the tubing to allow for advancement in deep or older wells.
- 4.9.3.3. A peristaltic pump cannot be used to sample wells in which the depth to water is greater than approximately 25 feet.

4.9.4. Sampling Depth

- 4.9.4.1. If conditions exist that prevent the appropriate pump or tubing from being advanced to the midpoint of the saturated portion of the screened interval, low-flow sampling techniques shall not be used. Instead, sampling shall be conducted using conventional purging and sampling techniques, as described in LEA SOP 10004 entitled *Liquid Sample Collection and Field Analysis*. Justification for not using low-flow sampling techniques must be provided in the field paperwork.

4.10. Field Documentation

- 4.10.1. Field documentation shall include at a minimum: a chain-of-custody form, Field Data Record Groundwater Form, Sample Collection Form, Daily Field Report. Sample labels and sample seals shall be used for proper sample identification.
 - 4.10.1.1. The labels shall be sufficiently durable to withstand immersion for 48 hours without detaching and to withstand normal handling. The information provided shall be legible at all times.



4.10.1.2. The following information shall be provided on the sample label using an indelible pen:

- Sample identification number.
- Date and time of collection.
- Place of collection.
- Parameter(s) requested (if space permits).

4.10.1.3. Appropriate field forms will be used to log all pertinent information with an indelible pen. The following information shall be provided:

- Project and site identification.
- LEA commission number.
- Identification of well.
- Static water level measurement technique.
- Presence of immiscible layers and detection method.
- Time well purged.
- Collection method for immiscible layers and sample identification numbers.
- Well evacuation procedure/equipment.
- Sample withdrawal procedure/equipment.
- Date and time of collection.
- Types of sample containers used and sample identification numbers.
- Preservative(s) used.
- Parameters requested for analysis.
- Field analysis method(s).
- Whether or not field filtration was performed and the filter size, if appropriate.
- Field observations on day of sampling event.
- Record of site activities.
- Field personnel.



- Climatic conditions, including air temperature.
- Status of total production.
- Record of non-productive time.

4.10.1.4. The Field Sampling Record shall include at a minimum the following information:

- Identification of well.
- Date and time of collection.
- Name of collector.
- Sample number.

4.10.1.5. The chain-of-custody record shall include the following information:

- Company's name and location.
- Date and time of collection.
- Sample number.
- Container type, number, size.
- Preservative used.
- Signature of collector.
- Signatures of persons involved in the chain of possession.
- Analyses to be performed.
- Type and number of samples.

4.10.1.6. The Field Data Record Groundwater Form shall be updated during the sampling of each well and include the following information:

- Identification of well.
- Well depth, diameter, depth to water.
- Static water level depth and measurement technique.
- Purge volume and pumping rate.
- Time well is purged.



- Measurements of initial field parameters and all subsequent readings.
- Any specific circumstances, as described above, such as field filtering, lack of stabilization of parameters, water characteristics, etc.
- LEA commission number.
- Date.

4.10.1.7. The Daily Field Record shall include the following information:

- Client's name, location, LEA commission number, date.
- Instrument make, model, and type.
- Calibration readings.
- Calibration/filtration lot numbers.
- Field personnel and signature.

4.10.1.8. The Daily Field Record shall assure the completeness of the sampling round and include the following information:

- Reviewer's name, date, and LEA commission number.
- Review of all necessary site activities and field forms.
- Statement of corrective actions for deficiencies.

5. References

- 5.1. United States Environmental Protection Agency (EPA), Region I. *Low Stress (Low Flow) Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells*, July 30, 1996, Revision 2.
- 5.2. EPA. *Groundwater Sampling Guidelines for Superfund and RCRA Project Managers – Groundwater Forum Issue Paper*, Office of Solid Waste and Emergency Response, (EPA 542-S-02-001), May 2002.
- 5.3. Robert W. Puls and Michael Barcelona, EPA. *Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures*, in Groundwater Issue, (EPA/540/S-95/504), April 1996.



- 5.4. Connecticut Department of Environmental Protection, Bureau of Water Management, Permitting Enforcement and Remediation Division. *Site Characterization Guidance Document*, Draft, June 12, 2000.

END OF DOCUMENT



**Loureiro Engineering Associates, Inc.
Standard Operating Procedure
for
Quality Assurance/Quality Control Measures
for
Field Activities**

**SOP ID: 10005
Date Initiated: 02/20/90
Revision No. 004: 12/31/01**

Approved By: <u>/s/ Jeffrey J. Loureiro</u>	<u>12/19/01</u>
Jeffrey J. Loureiro	Date
President	
 <u>/s/ Nick D. Skoularikis</u>	 <u>12/19/01</u>
Nick D. Skoularikis	Date
Director of Quality	

REVISION RECORD

<u>Rev #</u>	<u>Date</u>	<u>Additions/Deletions/Modifications</u>
Initial Issue	02/20/90	
001-003	-	No record.
004	12/31/01	Updated to reflect new SOP format. Added section 4.3, Results Evaluation. Minor revisions throughout.



Loureiro Engineering Associates, Inc.
Standard Operating Procedure
for
Quality Assurance/Quality Control Measures
for
Field Activities

1. Statement of Purpose

This document describes procedures to be followed for proper Quality Assurance Quality Control (QA/QC) practices which shall incorporate all activities associated with sampling tool and instrument preparation, field measurements and sampling, proper documentation of field and post-field activities, QC sample preparation, chain-of-custody protocol and laboratory analytical procedures. The use of specific QA/QC measures is project-specific as defined in the project work plan. This standard operating procedure (SOP) was adopted in accordance with the Environmental Protection Agency (EPA) document *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods* (SW-846).

2. Definitions

- 2.1. Trip Blank: An aliquot of organic-free water or equivalent neutral reference material carried into the field but not exposed.
- 2.2. Equipment Blank: An aliquot of analyte-free deionized water processed through all sample collection equipment.
- 2.3. Replicate Samples: Samples that have been divided into two or more portions in the field.
- 2.4. Collocated Samples: Independent samples collected under identical circumstances in a way that they are equally representative of the parameter of interest.
- 2.5. Performance Evaluation (PE) Sample: A sample that mimics actual samples in all possible aspects, except that its composition is known to the auditor and unknown to the analyst.

3. Equipment

None



4. Procedure

4.1. General

4.1.1. All QA/QC sample preparation procedures shall be properly documented including:

- Name of person(s) or laboratory involved in sample preparation.
- Reagents used.
- Sample number.
- Analyses required.
- Concentration calculations.
- Accuracy of measurements.
- Number, type, size of containers used.
- Preservation method.
- Date and time of sample preparation.

4.1.2. All information shall be included in the field logbook and/or appropriate field forms, but not necessarily in the chain-of-custody record except as needed for proper sample identification and analysis. Blind sample numbers are being used in order not to disclose the nature of the sample to the laboratory. No information that would identify the sample as a QA/QC sample shall be included in the chain-of-custody record.

4.1.3. At the conclusion of each sampling day, a quality control review shall be conducted using the Field Quality Review Checklist and the Daily Field Report.

4.2. QC Sample Preparation

4.2.1. Trip Blank

4.2.1.1. Contaminated trip blanks may indicate contamination of the samples during the field trip or shipment to the lab, cross-contamination between the samples, contaminated sample vials, or improper handling.

4.2.1.2. Trip blanks shall be used only with samples that are to be analyzed for volatile organic compounds.



- 4.2.1.3. One trip blank shall be included per shipping container (cooler) carrying sample soil and/or groundwater samples that are to be analyzed for volatile organic compounds
- 4.2.1.4. Trip blanks are prepared using analyte-free deionized organic-free water prior to field activities associated with the sampling event, usually by the laboratory providing the sampling containers. Each trip blank is placed in a 40-ml glass VOA vial and is carried in the same shipping container as the sample(s). Trip blanks should not be opened at any time during transport.

4.2.2. Equipment Blank

- 4.2.2.1. The purpose of an equipment/rinsate blank is to determine if decontamination procedures were adequate or if any of the equipment might contribute contaminants to the sample.
- 4.2.2.2. An equipment blank is prepared by running analyte-free deionized water through all sample collection equipment (bailers, pumps, filters, split-spoon) and placing it in the appropriate sample containers for analysis. If equipment has been decontaminated in the field, the equipment blank shall be collected after decontamination procedures have been performed.
- 4.2.2.3. Equipment blanks shall be used when sampling surface water, groundwater, soil, and sediment.
- 4.2.2.4. One equipment blank shall be collected for each sample bottle/preservation technique/analysis procedure per matrix per sampling event, or as otherwise specified in project-specific documents.

4.2.3. Replicate Samples

- 4.2.3.1. Replicate samples provide precision information on handling, shipping, storage, preparation and laboratory analysis.
- 4.2.3.2. Replicate samples are samples that have been divided into two or more portions in the field. An example of a replicate sample is two identical sample bottles filled with water from the same bailer retrieval. To ensure homogeneity, the bailer should be emptied into a clean, decontaminated beaker used exclusively



for the purpose and containing sufficient volume for both sample containers, and from that into the sample containers.

- 4.2.3.3. Replicate samples cannot be used when sampling for volatile organic compounds.
- 4.2.3.4. One replicate sample shall be obtained for each sample bottle/preservation technique/analysis procedure per sampling event or one out of every 20 samples, unless collocated samples are used (see below), or as otherwise specified in project-specific documents.

4.2.4. Collocated Samples

- 4.2.4.1. Collocated samples provide precision information on sample acquisition, homogeneity, handling, shipping, storage, preparation and laboratory analysis.
- 4.2.4.2. Collocated samples are independent samples collected in such a way so that presumably they are equally representative of the parameter of interest. Examples of collocated samples are groundwater samples collected sequentially, soil core samples collected side-by-side, or air samples collected essentially at the same time from the same manifold.
- 4.2.4.3. Collocated samples are especially useful when sampling for volatile organic compounds, for which replicate samples cannot be used.
- 4.2.4.4. Collocated samples shall be obtained for each sample bottle/preservation technique/analysis procedure per sampling event or one out of every 20 samples, unless replicate samples are used (see above), or as otherwise specified in project-specific documents.

4.2.5. Split Samples

- 4.2.5.1. The purpose of split samples is to provide an assessment of the laboratory analytical procedure.
- 4.2.5.2. Split samples are collocated or replicate samples sent to two (or more) different laboratories.
- 4.2.5.3. Split samples can be used with any sample media. Split samples can be used in conjunction with spiked samples (see



below). In case contradictory results are obtained from the samples split between different laboratories, the spiked samples can be used to verify the analytical data (provided that the spiked samples were properly prepared and the appropriate documentation is available).

- 4.2.5.4. When used, one split/spiked sample per sample bottle/preservation technique/analysis procedure per sampling event or every 20 samples shall be included, or as specified in project-specific documents.

4.2.6. Spiked Samples

- 4.2.6.1. The purpose of spiked samples is to provide information on the precision of the laboratory analytical procedure. However, besides a wrong preparation, several other sources of error exist such as analyte stability, holding time and interactions with the sample matrix.
- 4.2.6.2. Spiked samples are samples spiked with the contaminants of interest. The compounds used for spiking should be of the same chemical group as the contaminants being investigated, but they do not have to be the exact chemical compounds. Spiking should be carefully designed and performed prior to the field investigations. Field matrix spikes are not generally recommended because of the high level of technical expertise required for proper preparation and documentation.
- 4.2.6.3. Can be used with any sample media, however, liquid matrices are preferred due to uniformity of mixing.
- 4.2.6.4. When used, one split/spiked sample per sample bottle/preservation technique/analysis procedure per sampling event or every 20 samples shall be included, or as otherwise specified in project-specific documents. In order to ensure defensible data, performance evaluation (PE) samples, prepared by an independent vendor, are typically being used. The ordering and handling procedures and record keeping requirements are discussed in Loureiro Engineering Associates, Inc. (LEA's) *SOP for Preparation of PE Samples* (SOP 10030).



4.3. Result Evaluation

4.3.1. The analytical results on QA/QC samples should be evaluated along with the remaining analytical data as follows:

4.3.1.1. No constituents should be detected in the trip blank or equipment blank.

4.3.1.2. The relative percent differences (RPDs) shall be computed for all constituents detected in both duplicate samples used.

The RPD between two measurements (e.g., M1 and M2) is calculated as follows:

$$RPD = \frac{|M1 - M2|}{(M1 + M2)/2} \times 100\%$$

4.3.1.3. Any deviations in the performance evaluation samples shall be brought to the attention of the laboratory. An investigation shall then be performed by the laboratory of the method used, laboratory QA/QC procedures followed, and computations performed. The laboratory shall report the results of their investigation and any corrective actions taken.

5. References

5.1. EPA, *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods* (SW-846).

END OF DOCUMENT



ATTACHMENT C-2

Data Quality Assessment Worksheets



UTC: 2009 Quarterly GW-F&H Buildings

RCP Review

Laboratory: Accutest
 SDG: M81231
 Date Samples Collected: 3/12/2009
 RCP Certification Form Included: Yes
 Laboratory Case Narrative Included: Yes

Note 1: Bias High: reported result may be lower, RLs are accepted as reported.
 Bias Low: reported result may be higher, RLs may be higher

SAMPLE #	Lab #	Location ID	COMPOUND	QC OUTLIER	%R or Method Blank Contamination	RPD	BIAS	COMMENTS
1117577	M81231-1, -2	HB-MW-04	Chloromethane	Initial Calibration Standard			non-directional	employed quadratic regression
			Bromomethane	Initial Calibration Standard			non-directional	employed quadratic regression
			1,1-Dichloroethene	Initial Calibration Standard			non-directional	employed quadratic regression
			Acetone	Initial Calibration Standard			non-directional	employed quadratic regression
			trans-1,2-Dichloroethene	Initial Calibration Standard			non-directional	employed quadratic regression
			cis-1,2-Dichloroethene	Initial Calibration Standard			non-directional	employed quadratic regression
			trans-1,4-dichloro-2-butene	Initial Calibration Standard			non-directional	employed quadratic regression
			Naphthalene	Initial Calibration Standard			non-directional	employed quadratic regression
			1,2,3-Trichlorobenzene	Continuing Calibration Check	>30% Diff		non-directional	employed quadratic regression
			Naphthalene	Continuing Calibration Check	>30% Diff		non-directional	
1117578	M81231-3, -4	HB-MW-05	Chloromethane	Initial Calibration Standard			non-directional	employed quadratic regression
			Bromomethane	Initial Calibration Standard			non-directional	employed quadratic regression
			1,1-Dichloroethene	Initial Calibration Standard			non-directional	employed quadratic regression
			Acetone	Initial Calibration Standard			non-directional	employed quadratic regression
			trans-1,2-Dichloroethene	Initial Calibration Standard			non-directional	employed quadratic regression
			cis-1,2-Dichloroethene	Initial Calibration Standard			non-directional	employed quadratic regression
			trans-1,4-dichloro-2-butene	Initial Calibration Standard			non-directional	employed quadratic regression
			Naphthalene	Initial Calibration Standard			non-directional	employed quadratic regression
			1,2,3-Trichlorobenzene	Continuing Calibration Check	>30% Diff		non-directional	
			Naphthalene	Continuing Calibration Check	>30% Diff		non-directional	
1117579	M81231-5, -6	FB-MW-02	Chloromethane	Initial Calibration Standard			non-directional	employed quadratic regression
			Bromomethane	Initial Calibration Standard			non-directional	employed quadratic regression
			1,1-Dichloroethene	Initial Calibration Standard			non-directional	employed quadratic regression
			Acetone	Initial Calibration Standard			non-directional	employed quadratic regression
			trans-1,2-Dichloroethene	Initial Calibration Standard			non-directional	employed quadratic regression
			cis-1,2-Dichloroethene	Initial Calibration Standard			non-directional	employed quadratic regression
			trans-1,4-dichloro-2-butene	Initial Calibration Standard			non-directional	employed quadratic regression
			Naphthalene	Initial Calibration Standard			non-directional	employed quadratic regression
			1,2,3-Trichlorobenzene	Continuing Calibration Check	>30% Diff		non-directional	
			Naphthalene	Continuing Calibration Check	>30% Diff		non-directional	
1117583	M81231-7	TRIP BLANK	Chloromethane	Initial Calibration Standard			non-directional	employed quadratic regression
			Bromomethane	Initial Calibration Standard			non-directional	employed quadratic regression
			1,1-Dichloroethene	Initial Calibration Standard			non-directional	employed quadratic regression
			Acetone	Initial Calibration Standard			non-directional	employed quadratic regression
			trans-1,2-Dichloroethene	Initial Calibration Standard			non-directional	employed quadratic regression
			cis-1,2-Dichloroethene	Initial Calibration Standard			non-directional	employed quadratic regression
			trans-1,4-dichloro-2-butene	Initial Calibration Standard			non-directional	employed quadratic regression
			Naphthalene	Initial Calibration Standard			non-directional	employed quadratic regression
			1,2,3-Trichlorobenzene	Continuing Calibration Check	>30% Diff		non-directional	
			Naphthalene	Continuing Calibration Check	>30% Diff		non-directional	
1117582	M81231-8, -9	EQUIPMENT	Chloromethane	Initial Calibration Standard			non-directional	employed quadratic regression
			Bromomethane	Initial Calibration Standard			non-directional	employed quadratic regression
			1,1-Dichloroethene	Initial Calibration Standard			non-directional	employed quadratic regression
			Acetone	Initial Calibration Standard			non-directional	employed quadratic regression
			trans-1,2-Dichloroethene	Initial Calibration Standard			non-directional	employed quadratic regression
			cis-1,2-Dichloroethene	Initial Calibration Standard			non-directional	employed quadratic regression
			trans-1,4-dichloro-2-butene	Initial Calibration Standard			non-directional	employed quadratic regression
			Naphthalene	Initial Calibration Standard			non-directional	employed quadratic regression
			1,2,3-Trichlorobenzene	Continuing Calibration Check	>30% Diff		non-directional	
			Naphthalene	Continuing Calibration Check	>30% Diff		non-directional	

UTC: 2009 Quarterly GW-F&H Buildings

RCP Review

Laboratory: Accutest
 SDG: M81232
 Date Samples Collected: 3/12/2009
 RCP Certification Form Included: Yes
 Laboratory Case Narrative Included: Yes

Note 1: Bias High: reported result may be lower, RLs are accepted as reported.
 Bias Low: reported result may be higher, RLs may be higher

SAMPLE #	Lab #	Location ID	COMPOUND	QC OUTLIER	%R or Method Blank Contamination	RPD	BIAS	COMMENTS
1117574	M81232-1, -2	HB-MW-06	Chloromethane	Initial Calibration Standard			non-directional	employed quadratic regression
			Bromomethane	Initial Calibration Standard			non-directional	employed quadratic regression
			1,1-Dichloroethene	Initial Calibration Standard			non-directional	employed quadratic regression
			Acetone	Initial Calibration Standard			non-directional	employed quadratic regression
			trans-1,2-Dichloroethene	Initial Calibration Standard			non-directional	employed quadratic regression
			cis-1,2-Dichloroethene	Initial Calibration Standard			non-directional	employed quadratic regression
			trans-1,4-dichloro-2-butene	Initial Calibration Standard			non-directional	employed quadratic regression
			Naphthalene	Initial Calibration Standard			non-directional	employed quadratic regression
			1,2,3-Trichlorobenzene	Continuing Calibration Check	>30% Diff		non-directional	employed quadratic regression
			Naphthalene	Continuing Calibration Check	>30% Diff		non-directional	
1117575	M81232-3, -4	HB-MW-07	Chloromethane	Initial Calibration Standard			non-directional	employed quadratic regression
			Bromomethane	Initial Calibration Standard			non-directional	employed quadratic regression
			1,1-Dichloroethene	Initial Calibration Standard			non-directional	employed quadratic regression
			Acetone	Initial Calibration Standard			non-directional	employed quadratic regression
			trans-1,2-Dichloroethene	Initial Calibration Standard			non-directional	employed quadratic regression
			cis-1,2-Dichloroethene	Initial Calibration Standard			non-directional	employed quadratic regression
			trans-1,4-dichloro-2-butene	Initial Calibration Standard			non-directional	employed quadratic regression
			Naphthalene	Initial Calibration Standard			non-directional	employed quadratic regression
			1,2,3-Trichlorobenzene	Continuing Calibration Check	>30% Diff		non-directional	
			Naphthalene	Continuing Calibration Check	>30% Diff		non-directional	
1117576	M81232-5, -6	FB-MW-01	Chloromethane	Initial Calibration Standard			non-directional	employed quadratic regression
			Bromomethane	Initial Calibration Standard			non-directional	employed quadratic regression
			1,1-Dichloroethene	Initial Calibration Standard			non-directional	employed quadratic regression
			Acetone	Initial Calibration Standard			non-directional	employed quadratic regression
			trans-1,2-Dichloroethene	Initial Calibration Standard			non-directional	employed quadratic regression
			cis-1,2-Dichloroethene	Initial Calibration Standard			non-directional	employed quadratic regression
			trans-1,4-dichloro-2-butene	Initial Calibration Standard			non-directional	employed quadratic regression
			Naphthalene	Initial Calibration Standard			non-directional	employed quadratic regression
			1,2,3-Trichlorobenzene	Continuing Calibration Check	>30% Diff		non-directional	
			Naphthalene	Continuing Calibration Check	>30% Diff		non-directional	
1117581	M81231-7, -8	FB-MW-01	Chloromethane	Initial Calibration Standard			non-directional	employed quadratic regression
			Bromomethane	Initial Calibration Standard			non-directional	employed quadratic regression
			1,1-Dichloroethene	Initial Calibration Standard			non-directional	employed quadratic regression
			Acetone	Initial Calibration Standard			non-directional	employed quadratic regression
			trans-1,2-Dichloroethene	Initial Calibration Standard			non-directional	employed quadratic regression
			cis-1,2-Dichloroethene	Initial Calibration Standard			non-directional	employed quadratic regression
			trans-1,4-dichloro-2-butene	Initial Calibration Standard			non-directional	employed quadratic regression
			Naphthalene	Initial Calibration Standard			non-directional	employed quadratic regression
			1,2,3-Trichlorobenzene	Continuing Calibration Check	>30% Diff		non-directional	
			Naphthalene	Continuing Calibration Check	>30% Diff		non-directional	

UTC: 2009 Quarterly GW-F&H Buildings

RCP Review

Laboratory: Accutest
 SDG: M83766
 Date Samples Collected: 6/18/2009
 RCP Certification Form Included: Yes
 Laboratory Case Narrative Included: Yes

Note 1: Bias High: reported result may be lower, RLs are accepted as reported.
 Bias Low: reported result may be higher, RLs may be higher

SAMPLE #	Lab #	Location ID	COMPOUND	QC OUTLIER	%R or Method Blank Contamination	RPD	BIAS	COMMENTS
1122876	-1	HB-MW-06	Chloromethane	Laboratory Control Sample	59		low	
			Dichlorodifluoromethane	Laboratory Control Sample	40		low	
			Benzene	Initial Calibration Standard			non-directional	employed quadratic regression
			Chloromethane	Initial Calibration Standard			non-directional	employed quadratic regression
			Dichlorodifluoromethane	Initial Calibration Verification	>35% Diff.		non-directional	
			2,2-Dichloropropane	Continuing Calibration Check	>30% Diff.		non-directional	
1122876uf	-2	HB-MW-06	No QC issues					
1122877	-3	HB-MW-04	Chloromethane	Laboratory Control Sample	59		low	
			Dichlorodifluoromethane	Laboratory Control Sample	40		low	
			Benzene	Initial Calibration Standard			non-directional	employed quadratic regression
			Chloromethane	Initial Calibration Standard			non-directional	employed quadratic regression
			Dichlorodifluoromethane	Initial Calibration Verification	>35% Diff.		non-directional	
			2,2-Dichloropropane	Continuing Calibration Check	>30% Diff.		non-directional	
1122877uf	-4	HB-MW-04	No QC issues					
1122878	-5	HB-MW-05	Chloromethane	Laboratory Control Sample	59		low	
			Dichlorodifluoromethane	Laboratory Control Sample	40		low	
			Benzene	Initial Calibration Standard			non-directional	employed quadratic regression
			Chloromethane	Initial Calibration Standard			non-directional	employed quadratic regression
			Dichlorodifluoromethane	Initial Calibration Verification	>35% Diff.		non-directional	
			2,2-Dichloropropane	Continuing Calibration Check	>30% Diff.		non-directional	
1122878uf	-6	HB-MW-05	No QC issues					
1122881	-7	EQUIPMENT	Chloromethane	Laboratory Control Sample	59		low	
			Dichlorodifluoromethane	Laboratory Control Sample	40		low	
			Benzene	Initial Calibration Standard			non-directional	employed quadratic regression
			Chloromethane	Initial Calibration Standard			non-directional	employed quadratic regression
			Dichlorodifluoromethane	Initial Calibration Verification	>35% Diff.		non-directional	
			2,2-Dichloropropane	Continuing Calibration Check	>30% Diff.		non-directional	
1122881uf	-8	EQUIPMENT	No QC issues					
1122882	-9	TRIP BLANK	Acetone	Method Blank Contamination	10.2 ug/l			Calculated RL is 102 ug/L
			Dichlorodifluoromethane	Laboratory Control Sample	140 / 143		high	
1122880uf	-10	FB-MW-02						
1122873	-11	HB-MW-07	Chloromethane	Laboratory Control Sample	59		low	
			Dichlorodifluoromethane	Laboratory Control Sample	40		low	
			Benzene	Initial Calibration Standard			non-directional	employed quadratic regression
			Chloromethane	Initial Calibration Standard			non-directional	employed quadratic regression
			Dichlorodifluoromethane	Initial Calibration Verification	>35% Diff.		non-directional	

1122873uf	-12	HB-MW-07	2,2-Dichloropropane	Continuing Calibration Check	>30% Diff.	non-directional	
				No QC issues			
1122874	-13	FB-MW-01	Chloromethane	Laboratory Control Sample	59	low	
			Dichlorodifluoromethane	Laboratory Control Sample	40	low	
			Benzene	Initial Calibration Standard		non-directional	employed quadratic regression
			Chloromethane	Initial Calibration Standard		non-directional	employed quadratic regression
			Dichlorodifluoromethane	Initial Calibration Verification	>35% Diff.	non-directional	
			2,2-Dichloropropane	Continuing Calibration Check	>30% Diff.	non-directional	
1122874uf	-14	FB-MW-01		No QC issues			
1122875	-15	FB-MW-02	Chloromethane	Laboratory Control Sample	59	low	
			Dichlorodifluoromethane	Laboratory Control Sample	40	low	
			Benzene	Initial Calibration Standard		non-directional	employed quadratic regression
			Chloromethane	Initial Calibration Standard		non-directional	employed quadratic regression
			Dichlorodifluoromethane	Initial Calibration Verification	>35% Diff.	non-directional	
			2,2-Dichloropropane	Continuing Calibration Check	>30% Diff.	non-directional	
1122875uf	-16	FB-MW-02		No QC issues			
1122880	-17	FB-MW-02	Chloromethane	Laboratory Control Sample	59	low	
			Dichlorodifluoromethane	Laboratory Control Sample	40	low	
			Benzene	Initial Calibration Standard		non-directional	employed quadratic regression
			Chloromethane	Initial Calibration Standard		non-directional	employed quadratic regression
			Dichlorodifluoromethane	Initial Calibration Verification	>35% Diff.	non-directional	
			2,2-Dichloropropane	Continuing Calibration Check	>30% Diff.	non-directional	

UTC: 2009 Quarterly GW-F&H Buildings

RCP Review

Laboratory:	Accutest
SDG:	M85952
Date Samples Collected:	9/18/2009
RCP Certification Form Included:	Yes
Laboratory Case Narrative Included:	Yes

Note 1: Bias High: reported result may be lower, RLs are accepted as reported.
 Bias Low: reported result may be higher, RLs may be higher

SAMPLE #	Lab #	Location ID	COMPOUND	QC OUTLIER	%R or Method Blank Contamination	RPD	BIAS	COMMENTS
1131962	-1	HB-MW-07	Isopropylbenzene	Laboratory Control Sample	134 / 137		high	
			Dichlorodifluoromethane	Initial Calibration Standard			non-directional	employed quadratic regression
			Methyl tert butyl ether	Initial Calibration Standard			non-directional	employed quadratic regression
			2,2-Dichloropropane	Initial Calibration Standard			non-directional	employed quadratic regression
			Carbon Tetrachloride	Initial Calibration Standard			non-directional	employed quadratic regression
			Isopropylbenzene	Initial Calibration Verification	>35% Diff.		non-directional	
1131962uf	-2	HB-MW-07	No QC issues					
1131963	-3	FB-MW-01	Isopropylbenzene	Laboratory Control Sample	134 / 137		high	
			Dichlorodifluoromethane	Initial Calibration Standard			non-directional	employed quadratic regression
			Methyl tert butyl ether	Initial Calibration Standard			non-directional	employed quadratic regression
			2,2-Dichloropropane	Initial Calibration Standard			non-directional	employed quadratic regression
			Carbon Tetrachloride	Initial Calibration Standard			non-directional	employed quadratic regression
			Isopropylbenzene	Initial Calibration Verification	>35% Diff.		non-directional	
1131963uf	-4	FB-MW-01	No QC issues					
1131964	-5	FB-MW-02	Isopropylbenzene	Laboratory Control Sample	134 / 137		high	
			Dichlorodifluoromethane	Initial Calibration Standard			non-directional	employed quadratic regression
			Methyl tert butyl ether	Initial Calibration Standard			non-directional	employed quadratic regression
			2,2-Dichloropropane	Initial Calibration Standard			non-directional	employed quadratic regression
			Carbon Tetrachloride	Initial Calibration Standard			non-directional	employed quadratic regression
			Isopropylbenzene	Initial Calibration Verification	>35% Diff.		non-directional	
1131964uf	-6	FB-MW-02	No QC issues					
1131970	-7	FB-MW-02	Isopropylbenzene	Laboratory Control Sample	134 / 137		high	
			Dichlorodifluoromethane	Initial Calibration Standard			non-directional	employed quadratic regression
			Methyl tert butyl ether	Initial Calibration Standard			non-directional	employed quadratic regression
			2,2-Dichloropropane	Initial Calibration Standard			non-directional	employed quadratic regression
			Carbon Tetrachloride	Initial Calibration Standard			non-directional	employed quadratic regression
			Isopropylbenzene	Initial Calibration Verification	>35% Diff.		non-directional	
1131970uf	-8	FB-MW-02	No QC issues					
1131965	-9	HB-MW-06	Isopropylbenzene	Laboratory Control Sample	134 / 137		high	
			Dichlorodifluoromethane	Initial Calibration Standard			non-directional	employed quadratic regression
			Methyl tert butyl ether	Initial Calibration Standard			non-directional	employed quadratic regression
			2,2-Dichloropropane	Initial Calibration Standard			non-directional	employed quadratic regression
			Carbon Tetrachloride	Initial Calibration Standard			non-directional	employed quadratic regression

			Isopropylbenzene	Initial Calibration Verification	>35% Diff.	non-directional	
1131965uf	-10	HB-MW-06		No QC issues			
1131966	-11	HB-MW-05	Isopropylbenzene	Laboratory Control Sample	134 / 137	high	
			Dichlorodifluoromethane	Initial Calibration Standard		non-directional	employed quadratic regression
			Methyl tert butyl ether	Initial Calibration Standard		non-directional	employed quadratic regression
			2,2-Dichloropropane	Initial Calibration Standard		non-directional	employed quadratic regression
			Carbon Tetrachloride	Initial Calibration Standard		non-directional	employed quadratic regression
			Isopropylbenzene	Initial Calibration Verification	>35% Diff.	non-directional	
1131966uf	-12	HB-MW-05		No QC issues			
1131967	-13	HB-MW-04	Isopropylbenzene	Laboratory Control Sample	134 / 137	high	
			Dichlorodifluoromethane	Initial Calibration Standard		non-directional	employed quadratic regression
			Methyl tert butyl ether	Initial Calibration Standard		non-directional	employed quadratic regression
			2,2-Dichloropropane	Initial Calibration Standard		non-directional	employed quadratic regression
			Carbon Tetrachloride	Initial Calibration Standard		non-directional	employed quadratic regression
			Isopropylbenzene	Initial Calibration Verification	>35% Diff.	non-directional	
1131967uf	-14	HB-MW-04		No QC issues			
1131968	-15	EQUIPMENT	Isopropylbenzene	Laboratory Control Sample	134 / 137	high	
			Dichlorodifluoromethane	Initial Calibration Standard		non-directional	employed quadratic regression
			Methyl tert butyl ether	Initial Calibration Standard		non-directional	employed quadratic regression
			2,2-Dichloropropane	Initial Calibration Standard		non-directional	employed quadratic regression
			Carbon Tetrachloride	Initial Calibration Standard		non-directional	employed quadratic regression
			Isopropylbenzene	Initial Calibration Verification	>35% Diff.	non-directional	
1131968uf	-16	EQUIPMENT		No QC issues			
1131969	-17	TRIP BLANK	Isopropylbenzene	Laboratory Control Sample	134 / 137	high	
			Dichlorodifluoromethane	Initial Calibration Standard		non-directional	employed quadratic regression
			Methyl tert butyl ether	Initial Calibration Standard		non-directional	employed quadratic regression
			2,2-Dichloropropane	Initial Calibration Standard		non-directional	employed quadratic regression
			Carbon Tetrachloride	Initial Calibration Standard		non-directional	employed quadratic regression
			Isopropylbenzene	Initial Calibration Verification	>35% Diff.	non-directional	

UTC: 2009 Quarterly GW-F&H Buildings

RCP Review

Laboratory: Accutest
 SDG: M87885
 Date Samples Collected: 12/7/2009
 RCP Certification Form Included: Yes
 Laboratory Case Narrative Included: Yes

Note 1: Bias High: reported result may be lower, RLs are accepted as reported.
 Bias Low: reported result may be higher, RLs may be higher

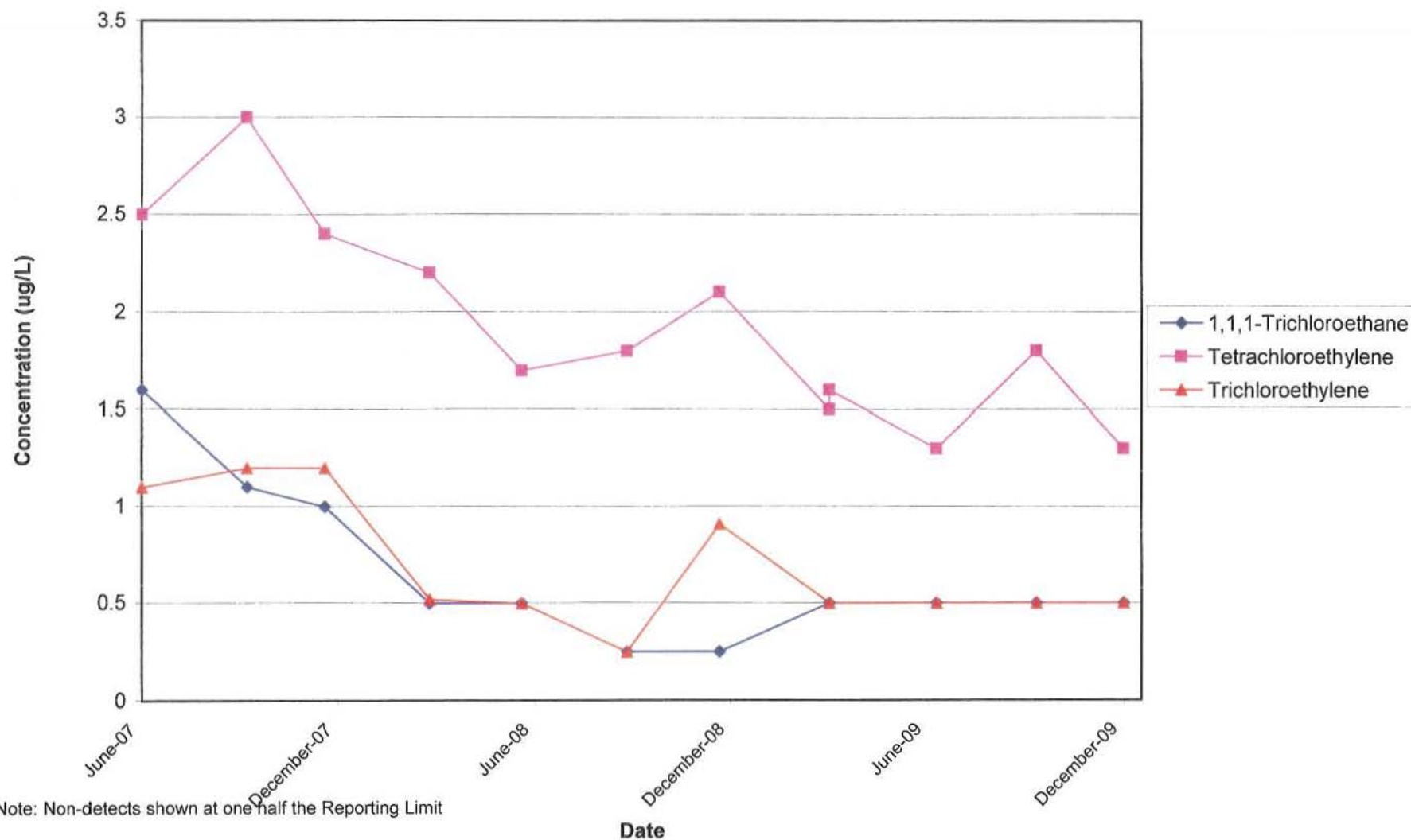
SAMPLE #	Lab #	Location ID	COMPOUND	QC OUTLIER	%R or Method Blank Contamination	RPD	BIAS	COMMENTS
1136034	-1	FB-MW-02	Acetone	Laboratory Control Sample		43		
			Dichlorodifluoromethane	Laboratory Control Sample	57 / 59			
			2,2-Dichloropropane	Laboratory Control Sample	148	46		
			Vinyl Chloride	Initial Calibration Standard			non-directional	employed quadratic regression
			Naphthalene	Initial Calibration Standard			non-directional	employed quadratic regression
			Acetone	Initial Calibration Verification	>35% Diff.		non-directional	
			Dichlorodifluoromethane	Continuing Calibration Check	>30% Diff.		non-directional	
1136034uf	-2	FB-MW-02	No QC issues					
1136035	-3	HB-MW-05	Acetone	Laboratory Control Sample		43		
			Dichlorodifluoromethane	Laboratory Control Sample	57 / 59			
			2,2-Dichloropropane	Laboratory Control Sample	148	46		
			Acetone	MS/MSD	58	44	low, non-directional	
			2-Butanone	MS/MSD	69	33	low, non-directional	
			Chloromethane	MS/MSD	67		low	
			Dichlorodifluoromethane	MS/MSD	46 / 42		low	
			Naphthalene	MS/MSD	141	34	high, non-directional	
			Vinyl Chloride	Initial Calibration Standard			non-directional	employed quadratic regression
			Naphthalene	Initial Calibration Standard			non-directional	employed quadratic regression
			Acetone	Initial Calibration Verification	>35% Diff.		non-directional	
			Dichlorodifluoromethane	Continuing Calibration Check	>30% Diff.		non-directional	
1136035uf	-4	HB-MW-05	No QC issues					
1136036	-5	HB-MW-07	Acetone	Laboratory Control Sample		43		
			Dichlorodifluoromethane	Laboratory Control Sample	57 / 59			
			2,2-Dichloropropane	Laboratory Control Sample	148	46		
			Vinyl Chloride	Initial Calibration Standard			non-directional	employed quadratic regression
			Naphthalene	Initial Calibration Standard			non-directional	employed quadratic regression
			Acetone	Initial Calibration Verification	>35% Diff.		non-directional	
			Dichlorodifluoromethane	Continuing Calibration Check	>30% Diff.		non-directional	
1136036uf	-6	HB-MW-07	No QC issues					
1136037	-7	EQUIPMENT	Acetone	Laboratory Control Sample		43		
			Dichlorodifluoromethane	Laboratory Control Sample	57 / 59			
			2,2-Dichloropropane	Laboratory Control Sample	148	46		
			Vinyl Chloride	Initial Calibration Standard			non-directional	employed quadratic regression
			Naphthalene	Initial Calibration Standard			non-directional	employed quadratic regression
			Acetone	Initial Calibration Verification	>35% Diff.		non-directional	
			Dichlorodifluoromethane	Continuing Calibration Check	>30% Diff.		non-directional	

1136037uf	-8	EQUIPMENT		No QC issues				
1136038	-9	TRIP BLANK	Acetone	Laboratory Control Sample		43		
			Dichlorodifluoromethane	Laboratory Control Sample	57 / 59			
			2,2-Dichloropropane	Laboratory Control Sample	148	46		
1136030	-10	HB-MW-06	Acetone	Laboratory Control Sample		43		
			Dichlorodifluoromethane	Laboratory Control Sample	57 / 59			
			2,2-Dichloropropane	Laboratory Control Sample	148	46		
			Vinyl Chloride	Initial Calibration Standard			non-directional	employed quadratic regression
			Naphthalene	Initial Calibration Standard			non-directional	employed quadratic regression
			Acetone	Initial Calibration Verification	>35% Diff.		non-directional	
			Dichlorodifluoromethane	Continuing Calibration Check	>30% Diff.		non-directional	
1136030uf	-11	HB-MW-06		No QC issues				
1136033	-12	HB-MW-06	Acetone	Laboratory Control Sample		43		
			Dichlorodifluoromethane	Laboratory Control Sample	57 / 59			
			2,2-Dichloropropane	Laboratory Control Sample	148	46		
			Vinyl Chloride	Initial Calibration Standard			non-directional	employed quadratic regression
			Naphthalene	Initial Calibration Standard			non-directional	employed quadratic regression
			Acetone	Initial Calibration Verification	>35% Diff.		non-directional	
			Dichlorodifluoromethane	Continuing Calibration Check	>30% Diff.		non-directional	
1136033uf	-13	HB-MW-06		No QC issues				
1136031	-14	HB-MW-04	Acetone	Laboratory Control Sample		43		
			Dichlorodifluoromethane	Laboratory Control Sample	57 / 59			
			2,2-Dichloropropane	Laboratory Control Sample	148	46		
			Vinyl Chloride	Initial Calibration Standard			non-directional	employed quadratic regression
			Naphthalene	Initial Calibration Standard			non-directional	employed quadratic regression
			Acetone	Initial Calibration Verification	>35% Diff.		non-directional	
			Dichlorodifluoromethane	Continuing Calibration Check	>30% Diff.		non-directional	
1136031uf	-15	HB-MW-04		No QC issues				
1136032	-16	FB-MW-01	Acetone	Laboratory Control Sample		43		
			Dichlorodifluoromethane	Laboratory Control Sample	57 / 59			
			2,2-Dichloropropane	Laboratory Control Sample	148	46		
			Vinyl Chloride	Initial Calibration Standard			non-directional	employed quadratic regression
			Naphthalene	Initial Calibration Standard			non-directional	employed quadratic regression
			Acetone	Initial Calibration Verification	>35% Diff.		non-directional	
			Dichlorodifluoromethane	Continuing Calibration Check	>30% Diff.		non-directional	
1136032uf	-17	FB-MW-01		No QC issues				

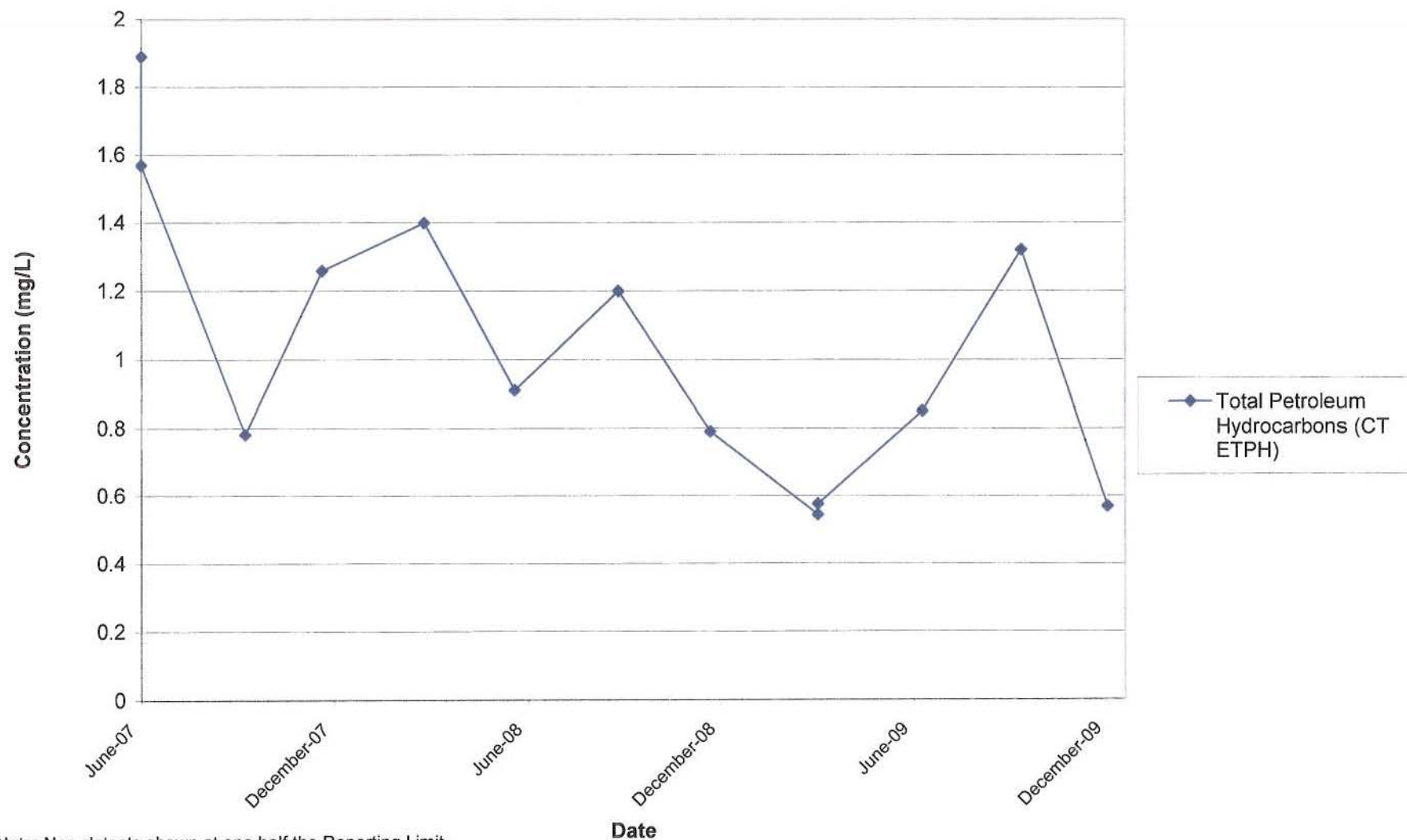
Appendix D

Select Constituent Concentration Graphs

FB-MW-01 - Select Volatile Organic Compounds
Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2009 Annual Groundwater Monitoring Report

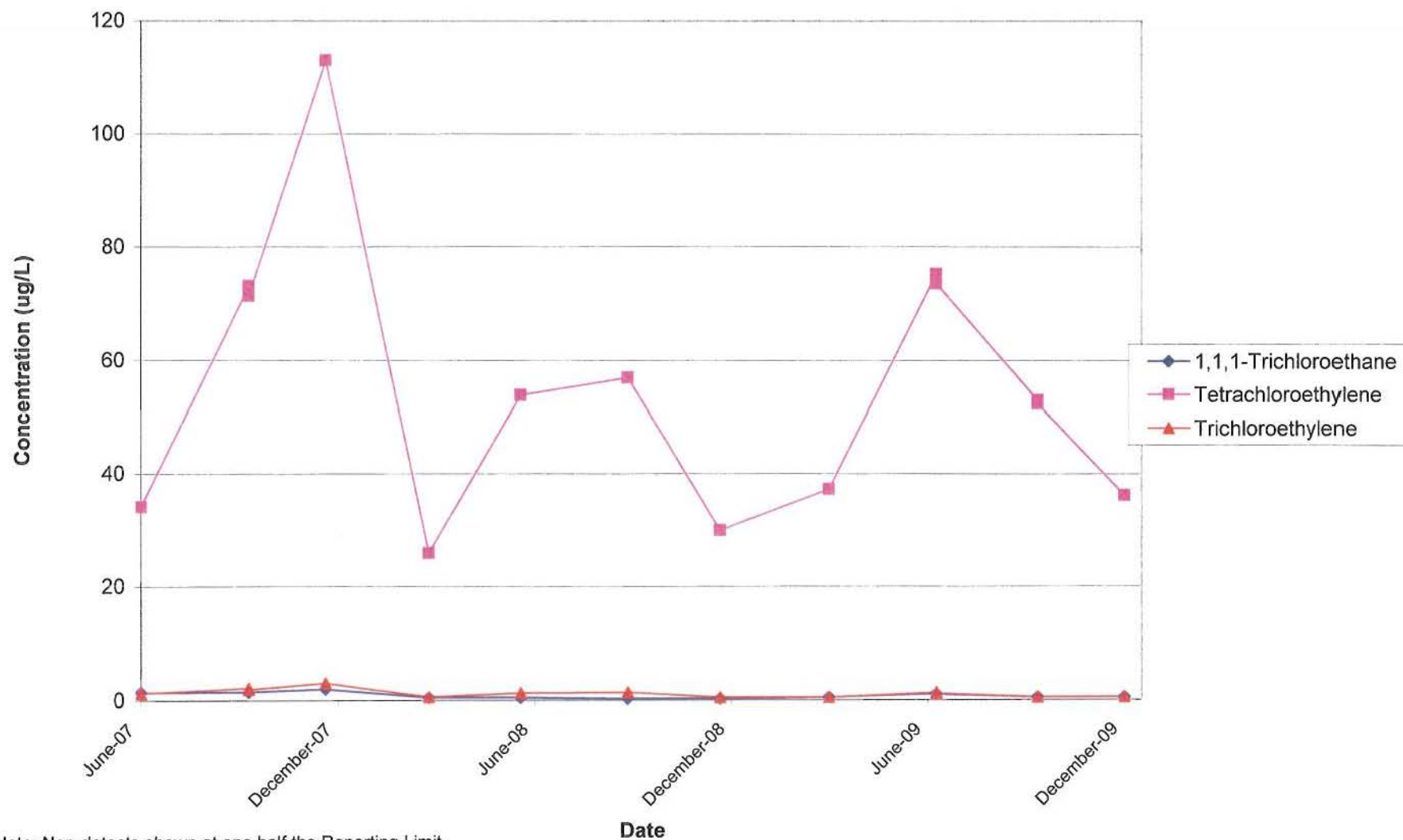


FB-MW-01 - Total Petroleum Hydrocarbons
Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2009 Annual Groundwater Monitoring Report



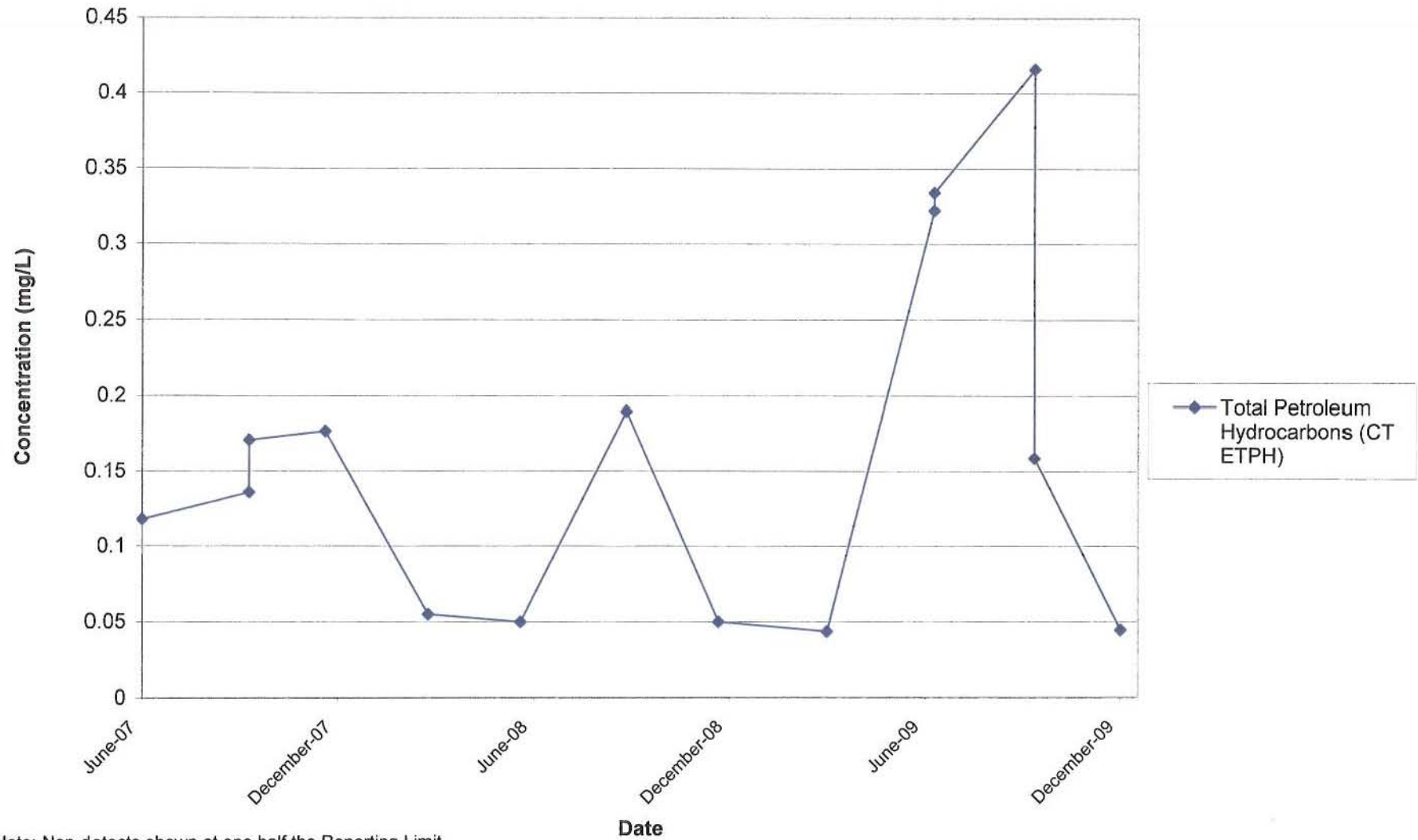
Note: Non-detects shown at one half the Reporting Limit

FB-MW-02 - Select Volatile Organic Compounds
Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2009 Annual Groundwater Monitoring Report

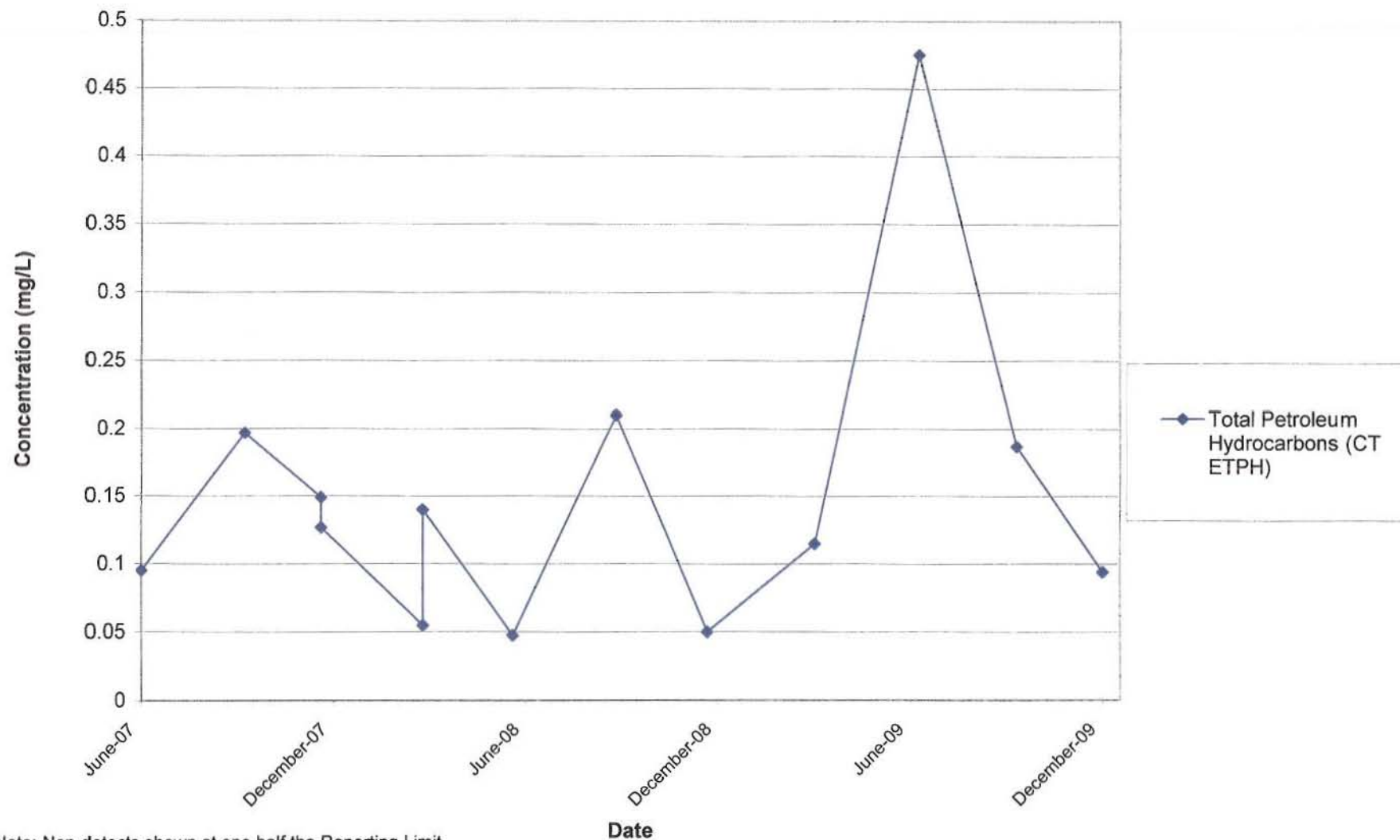


Note: Non-detects shown at one half the Reporting Limit

FB-MW-02 - Total Petroleum Hydrocarbons
Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2009 Annual Groundwater Monitoring Report

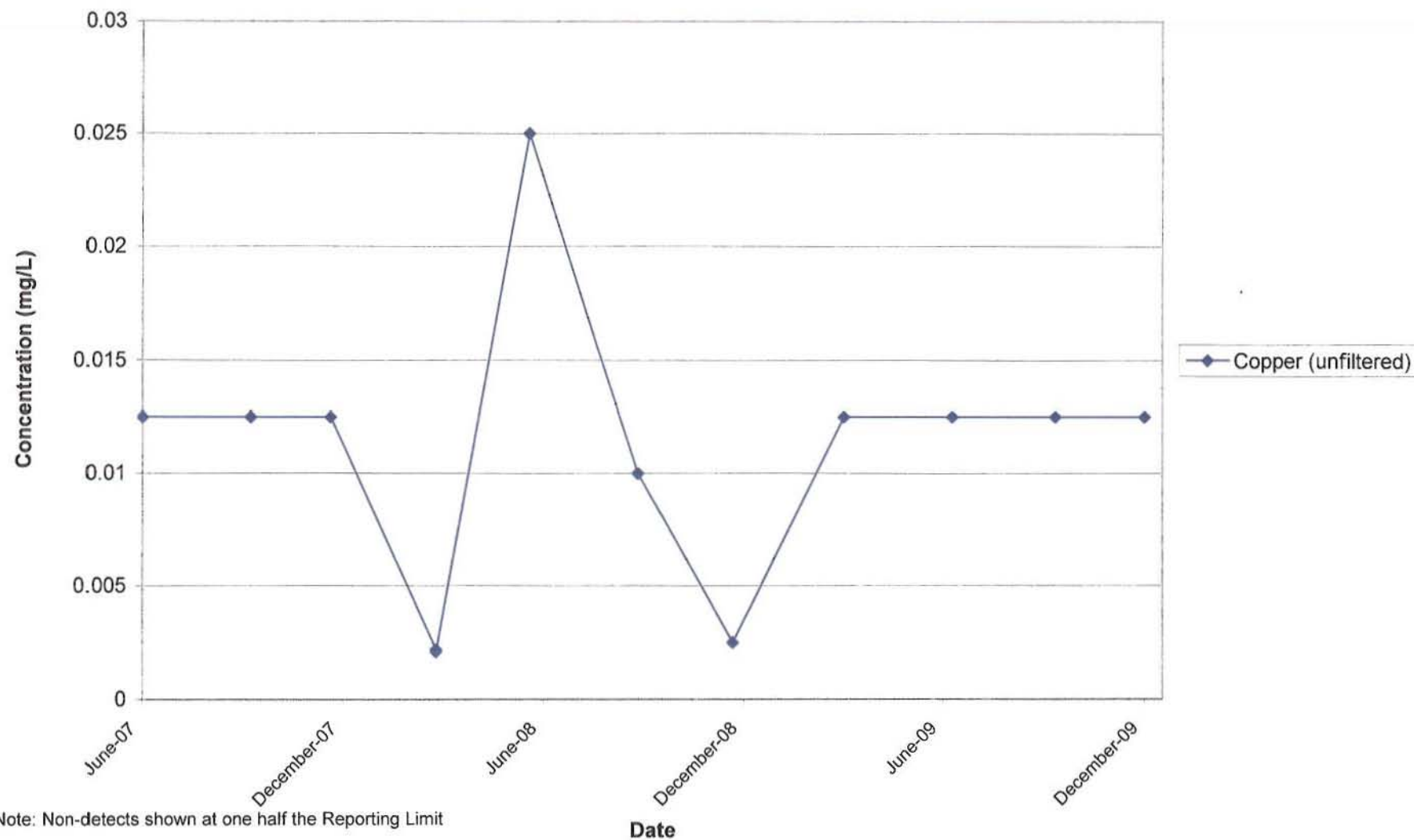


HB-MW-04 - Total Petroleum Hydrocarbons
Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2009 Annual Groundwater Monitoring Report

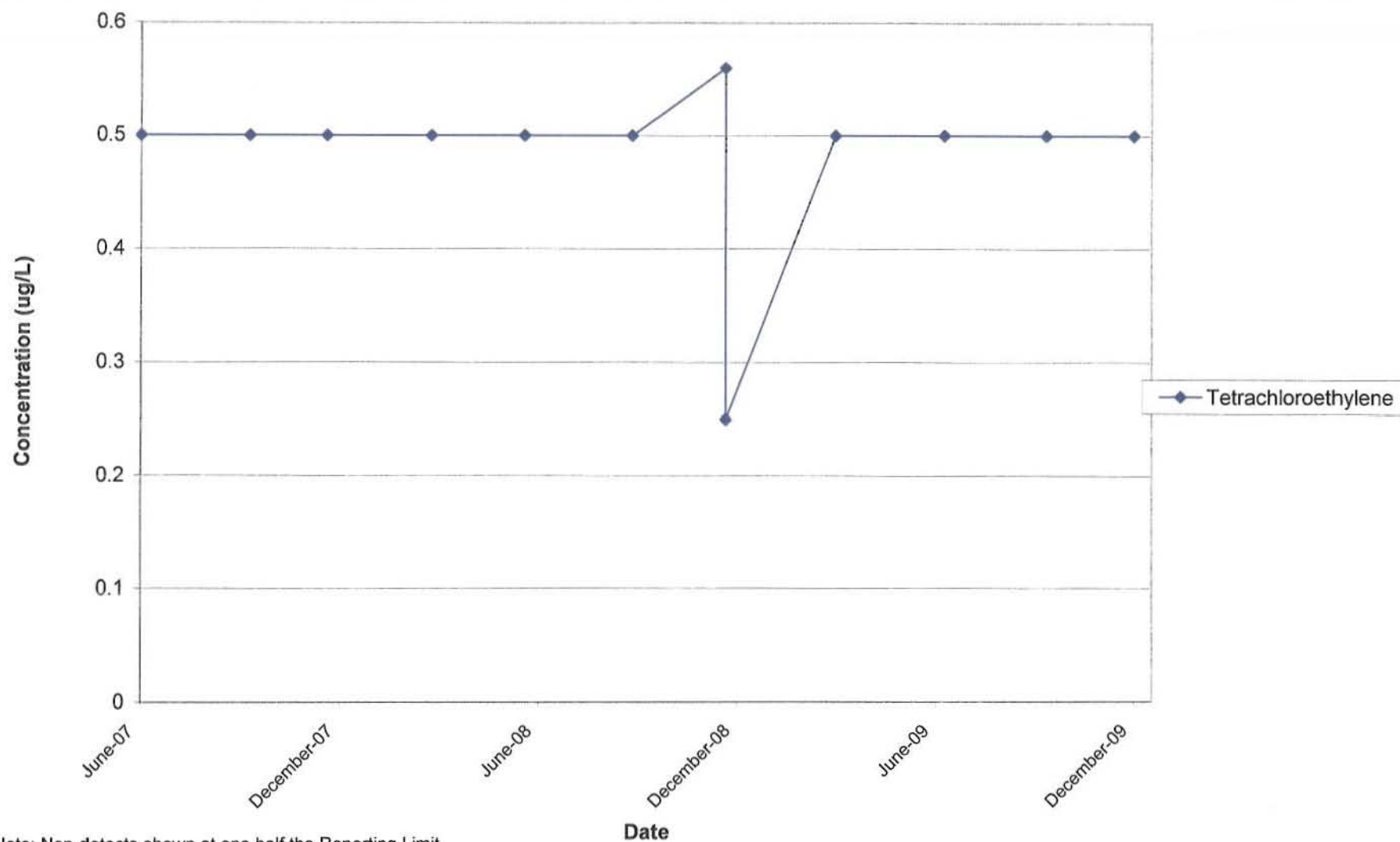


Note: Non-detects shown at one half the Reporting Limit

HB-MW-04 - Copper
Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2009 Annual Groundwater Monitoring Report

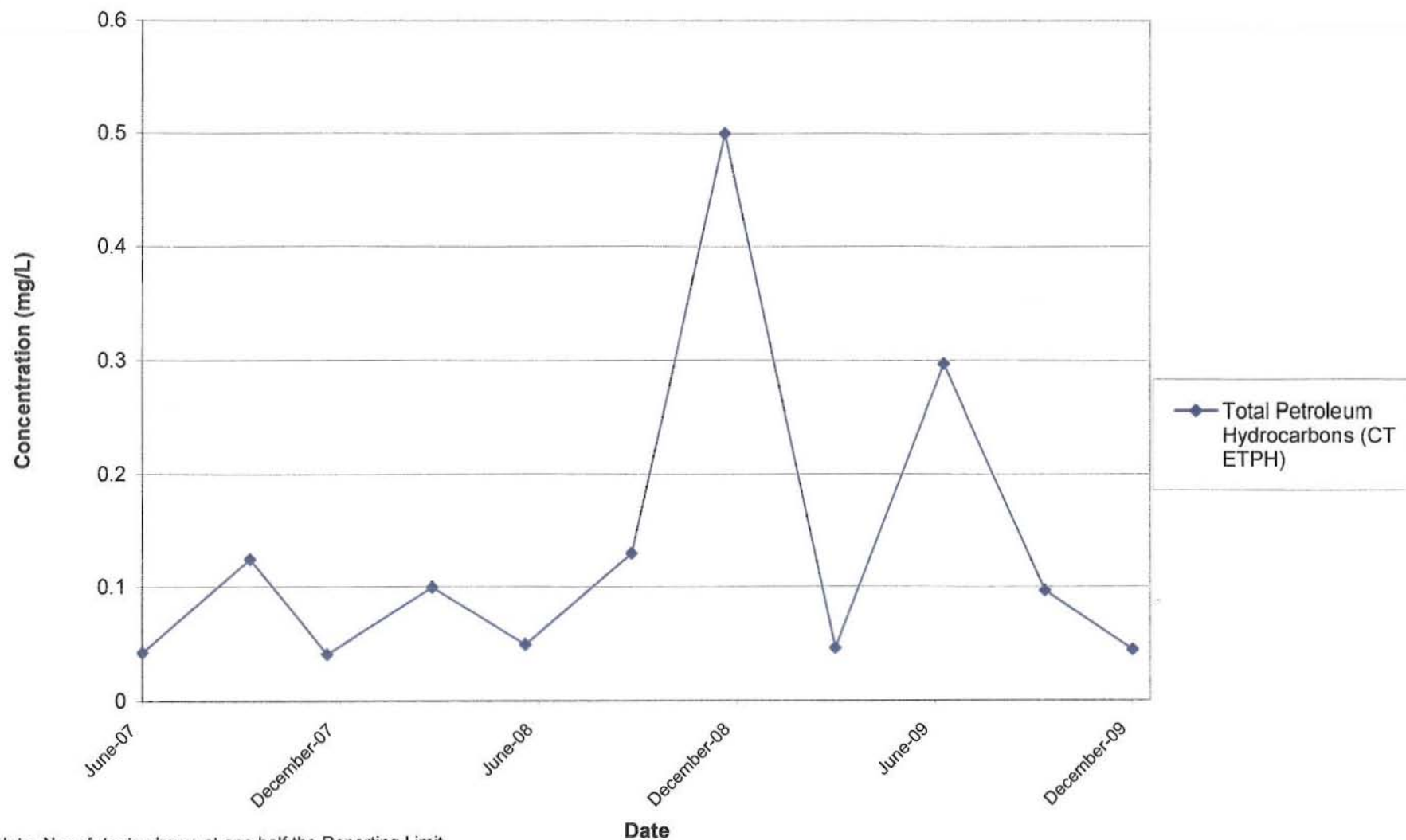


HB-MW-05 - Tetrachloroethylene
Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2009 Annual Groundwater Monitoring Report



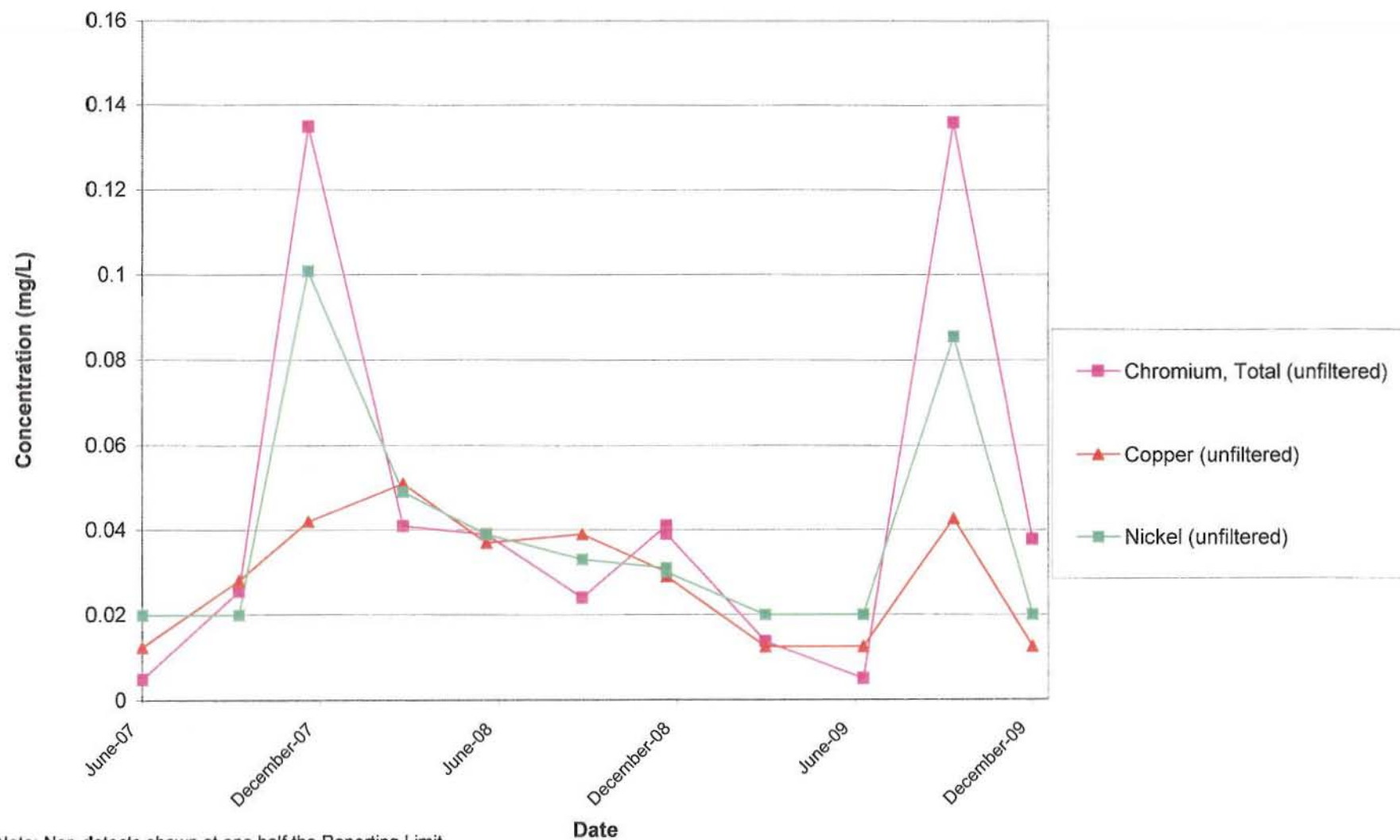
Note: Non-detects shown at one half the Reporting Limit

HB-MW-05 - Total Petroleum Hydrocarbons
Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2009 Annual Groundwater Monitoring Report



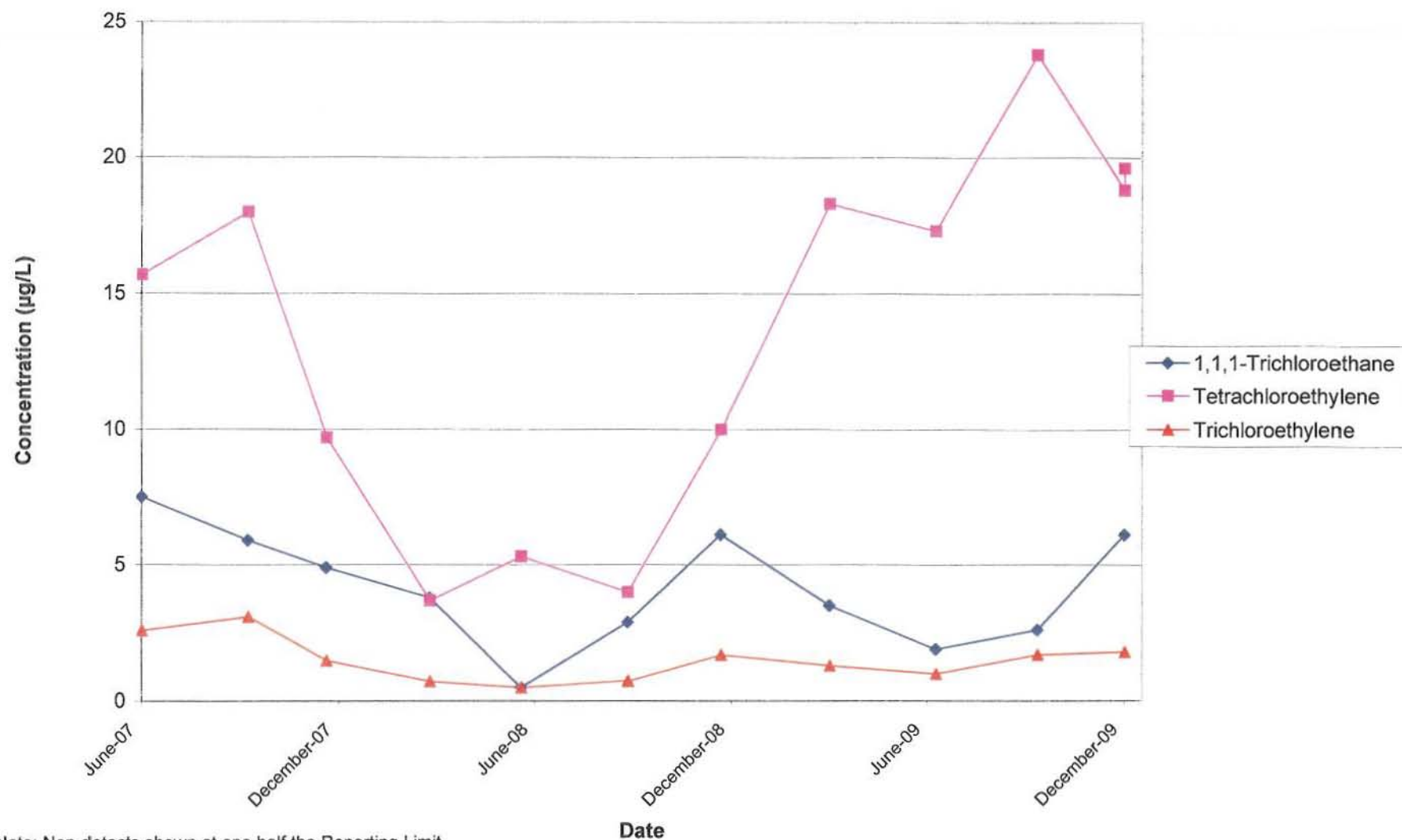
Note: Non-detects shown at one half the Reporting Limit

HB-MW-05 - Select Metals
Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2009 Annual Groundwater Monitoring Report



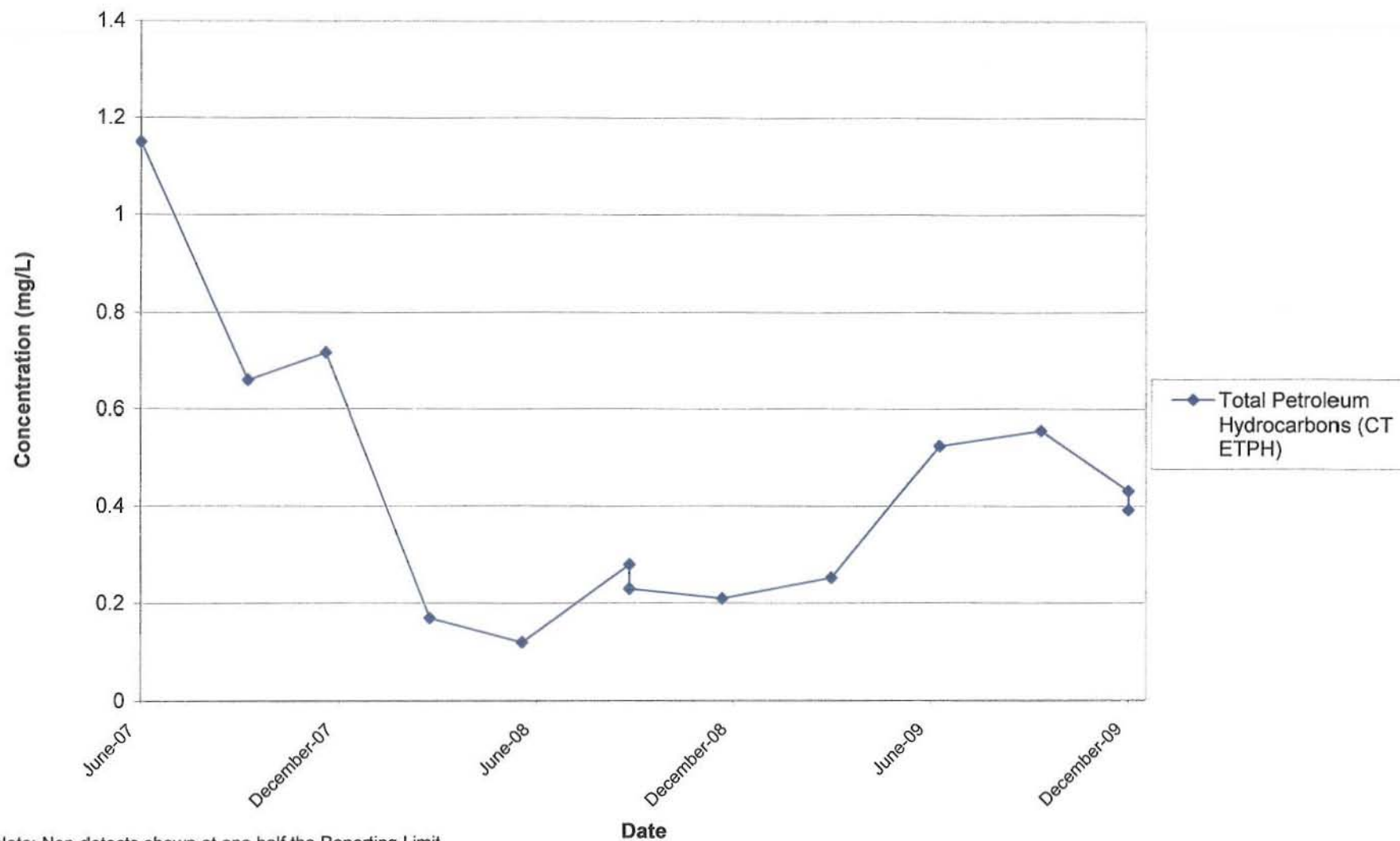
Note: Non-detects shown at one half the Reporting Limit

HB-MW-06 - Select Volatile Organic Compounds
Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2009 Annual Groundwater Monitoring Report



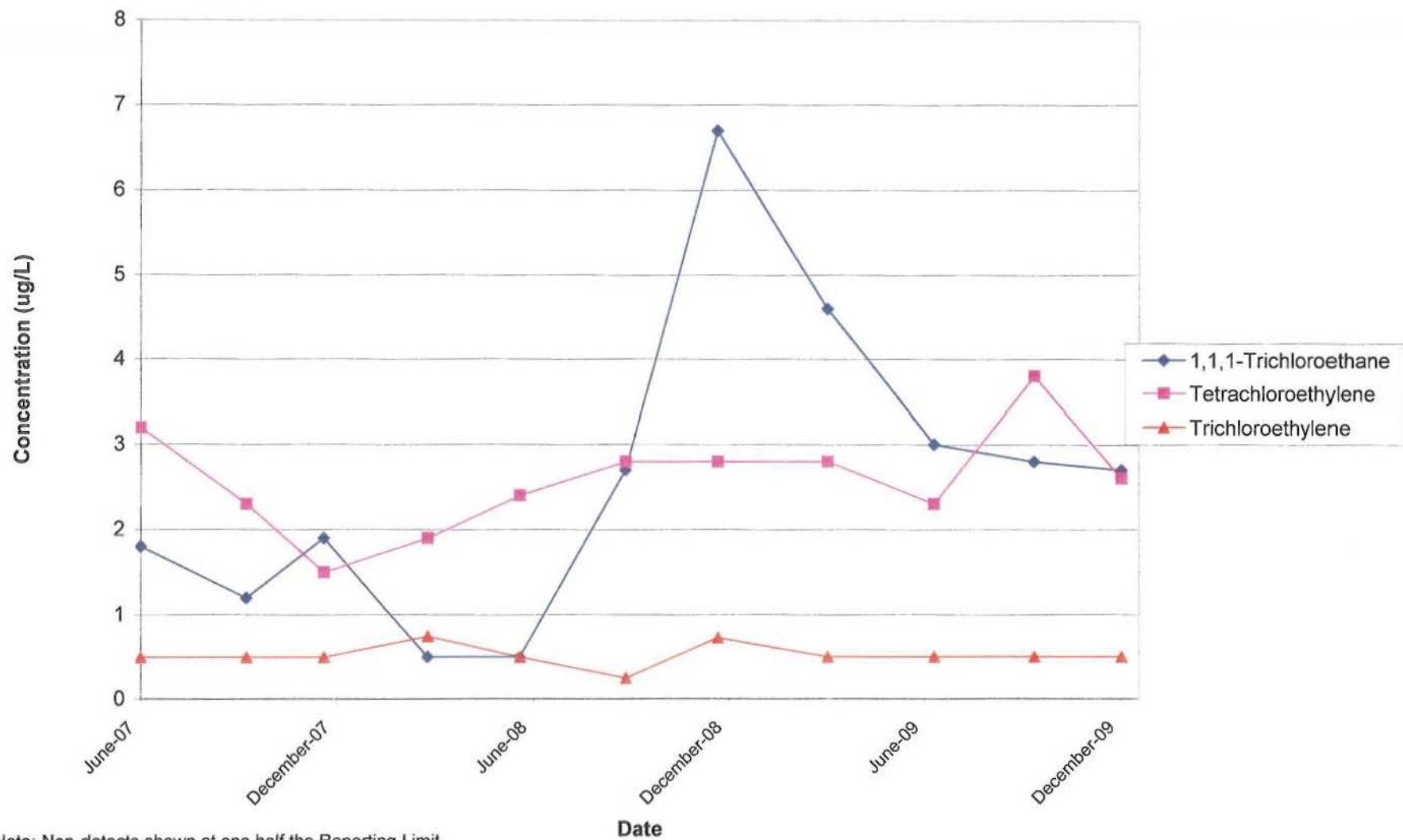
Note: Non-detects shown at one half the Reporting Limit

HB-MW-06 - Total Petroleum Hydrocarbons
Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2009 Annual Groundwater Monitoring Report



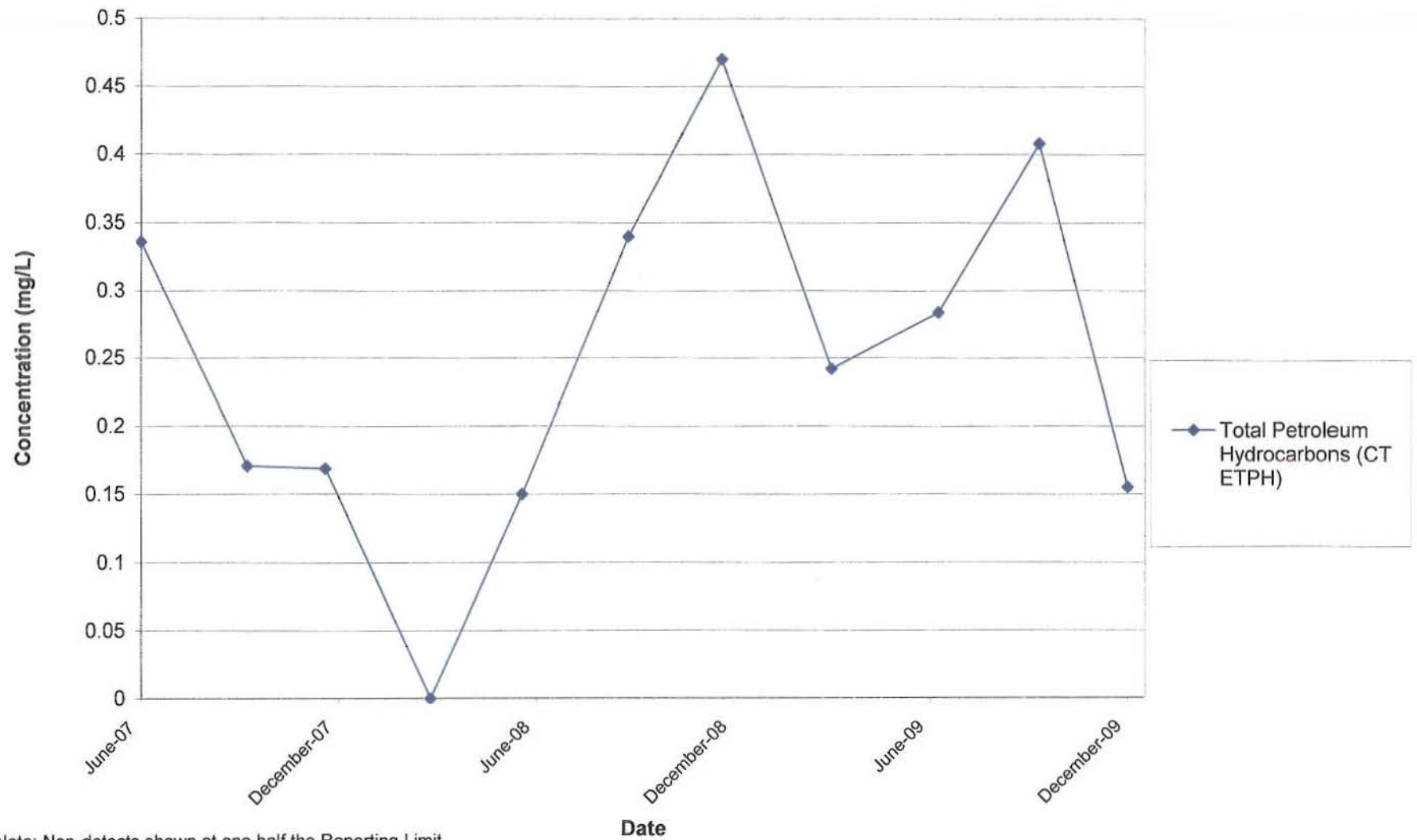
Note: Non-detects shown at one half the Reporting Limit

HB-MW-07 - Select Volatile Organic Compounds
Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2009 Annual Groundwater Monitoring Report



Note: Non-detects shown at one half the Reporting Limit

HB-MW-07 - Total Petroleum Hydrocarbons
Pratt & Whitney, East Hartford, Connecticut: F and H Buildings 2009 Annual Groundwater Monitoring Report



Note: Non-detects shown at one half the Reporting Limit

Appendix E

Post Remediation Maintenance Monitoring Forms

**United Technologies/Pratt & Whitney
2009 Post-Remediation Maintenance and Monitoring Program
F&H Buildings**

Weather Conditions: 30° - 40°
Inspection Date: 12/7/09
Inspection Time: a.m.

Inspector: Nate
Reviewed By: _____

INSPECTION POINT	DESCRIPTION	GOOD	FAIR	POOR
1) Signs of erosion	Check for gullies.	/		
2) Signs of settling	Look for ponding and for settling of pavement of more than 0.5 inches over a 5 square foot area.	/		
3) Signs of ponding	Look for areas of more than 5 square feet of standing water.		/	
4) Signs of pavement damage	Look for areas of spider cracking, spalling and loss of binder.	/		
5) Permanent Survey Markers	Look for damaged or missing markers.			
6) Monitoring well network	Check concrete collar protective casing, locks, legible well identification.			
	1. Condition of lock			/ No locks (covers Bolted)
	2. Visible ID of wells			/
	3. Ponding or infiltration of surface water	/		
	4. Condition of concrete collar	/		
	5. Condition of steel casing	/		

Report all deficiencies to the designated representative of United Technologies Corporation/Pratt & Whitney
List all deficiencies, the corrective measures taken, and the date corrective measures were completed:

1) Water Ponding Between MW-6 and MW-4

Corrective Action: No well IDs, However easy to ID with Map

2) Wells aren't locked, However all wells are Bolted shut

Corrective Action: _____

3) _____

Corrective Action: _____

4) _____

Corrective Action: _____

**United Technologies/Pratt & Whitney
2009 Post-Remediation Maintenance and Monitoring Program
F&H Buildings**

Weather Conditions: 60° Rain
Inspection Date: 6/18/09
Inspection Time: 2:00 PM

Inspector: Nate
Reviewed By: _____

INSPECTION POINT	DESCRIPTION	GOOD	FAIR	POOR
1) Signs of erosion	Check for gullies.	/		
2) Signs of settling	Look for ponding and for settling of pavement of more than 0.5 inches over a 5 square foot area.		/	
3) Signs of ponding	Look for areas of more than 5 square feet of standing water.		/	
4) Signs of pavement damage	Look for areas of spider cracking, spalling and loss of binder.	/		
5) Permanent Survey Markers	Look for damaged or missing markers.			
6) Monitoring well network	Check concrete collar protective casing, locks, legible well identification.			
	1. Condition of lock	/		
	2. Visible ID of wells			/
	3. Ponding or infiltration of surface water	/		
	4. Condition of concrete collar	/		
	5. Condition of steel casing	/		

Report all deficiencies to the designated representative of United Technologies Corporation/Pratt & Whitney

List all deficiencies, the corrective measures taken, and the date corrective measures were completed:

1) Ponding of water Near HB-mw-06 Going in a SE direction

Corrective Action: _____

2) No Visible Well ID's / Easy to Identify with Map

Corrective Action: _____

3) _____

Corrective Action: _____

4) _____

Corrective Action: _____